43619

# ENGLISH BOTANY;

OR,

## COLOURED FIGURES

OF

# BRITISH PLANTS,

WITH THEIR

## ESSENTIAL CHARACTERS, SYNONYMS, AND PLACES OF GROWTH.

TO WHICH WILL BE ADDED,

## OCCASIONAL REMARKS.

BY

*JAMES EDWARD SMITH, M.D. F.R.S.*

MEMBER OF THE IMP. ACAD. NATURÆ CURIOSORUM, THE ACADEMIES OF STOCKHOLM, UPSAL, TURIN, LISBON, LUND, BERLIN, PHILADELPHIA, AND THE NAT. HIST. SOCIETY OF PARIS; PRESIDENT OF THE LINNÆAN SOCIETY.

THE FIGURES BY

JAMES SOWERBY, F.L.S.

———"VIRESQUE ACQUIRIT EUNDO."———*Virg.*

VOL. X.

LONDON:

PRINTED BY J. DAVIS, CHANCERY-LANE;

And sold by the Proprietor, J. SOWERBY, at No. 2, Mead Place, Lambeth; by Messrs. WHITE, Fleet-street; JOHNSON, St. Paul's Church-yard; DILLY, in the Poultry; and by all Booksellers, &c. in Town and Country.

MDCCC.


G.R.
III.

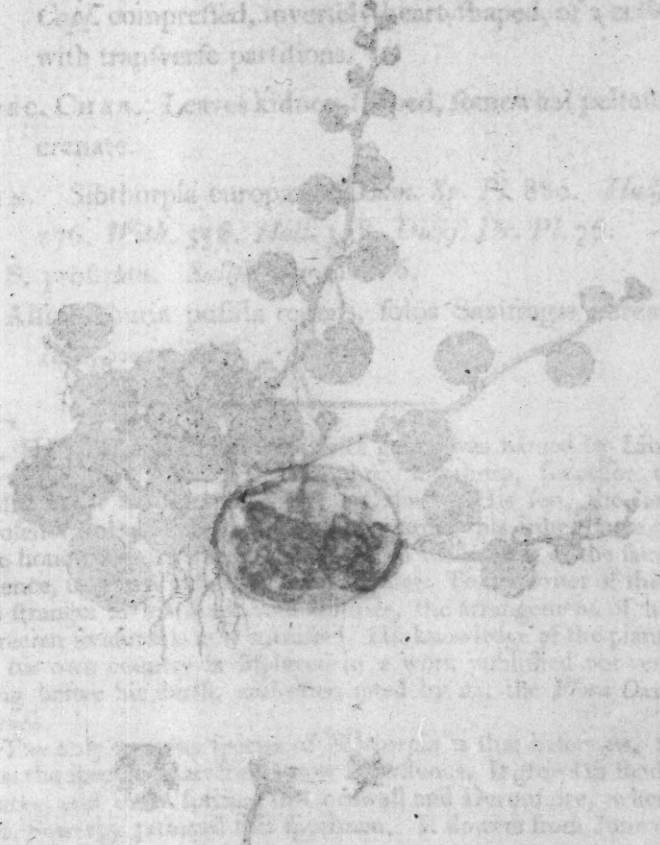
# SIBTHORPIA europæa.

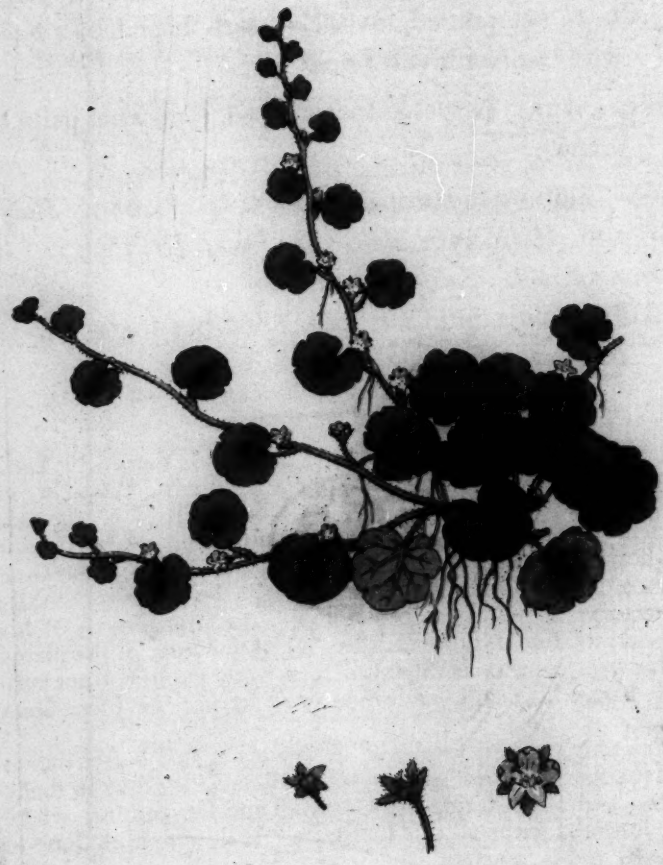
*Sibthorpia, or Cornish Money-wort.*

DIDYNAMIA Angiosperma.

GEN. CHAR. *Cal.* in 5 divisions. *Cor.* gaping, irregular. *Stam.* approaching each other in pairs. *Caps.* compressed, several-heart-shaped, of 2 cells, with transverse partitions.

SPEC. CHAR. Leaves kidney-shaped, somewhat pellucid-crenate.





# SIBTHORPIA europæa.

## *Sibthorpia, or Corniſh Money-wort.*

*DIDYNAMIA Angioſpermia.*

GEN. CHAR. *Cal.* in 5 diviſions. *Cor.* 5-cleft, irregular. *Stam.* approaching each other in pairs. *Capſ.* compreſſed, inverſely heart-ſhaped, of 2 cells, with tranſverſe partitions.

SPEC. CHAR. Leaves kidney-ſhaped, ſomewhat peltate, crenate.

SYN. Sibthorpia europæa. *Linn. Sp. Pl.* 880. *Hudſ.* 276. *With.* 556. *Hull.* 138. *Dickſ. Dr. Pl.* 76.

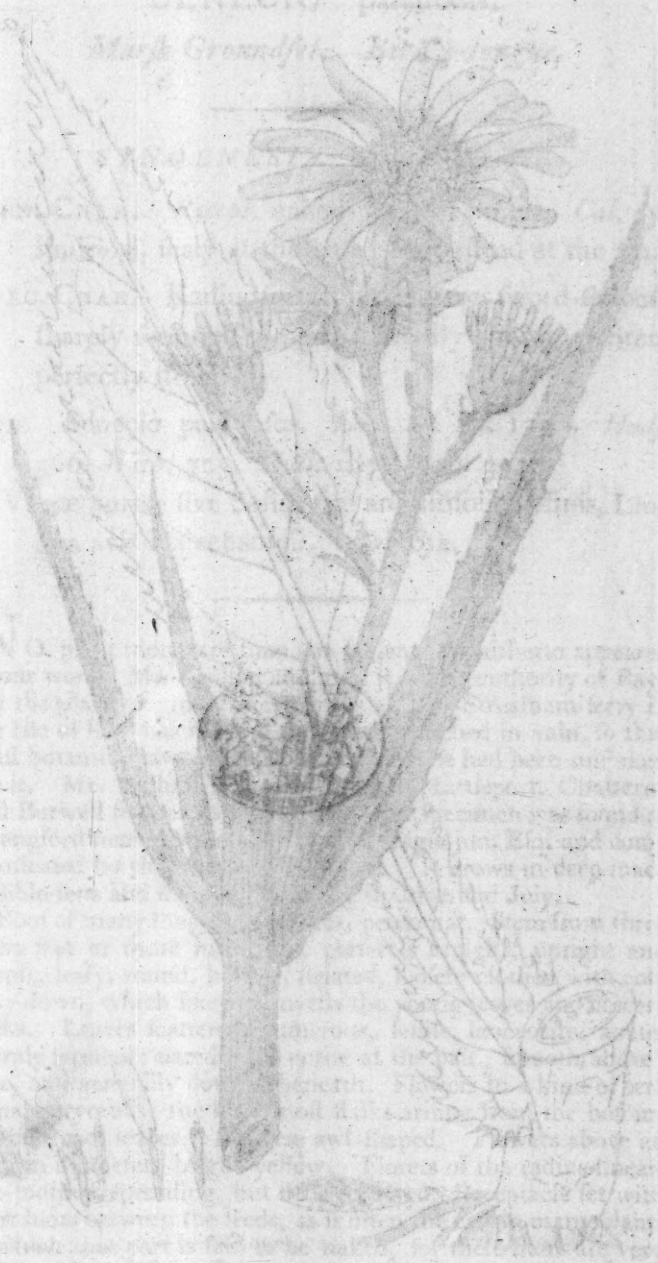
S. proſtrata. *Saliſb. Ic.* 11. *t.* 6.

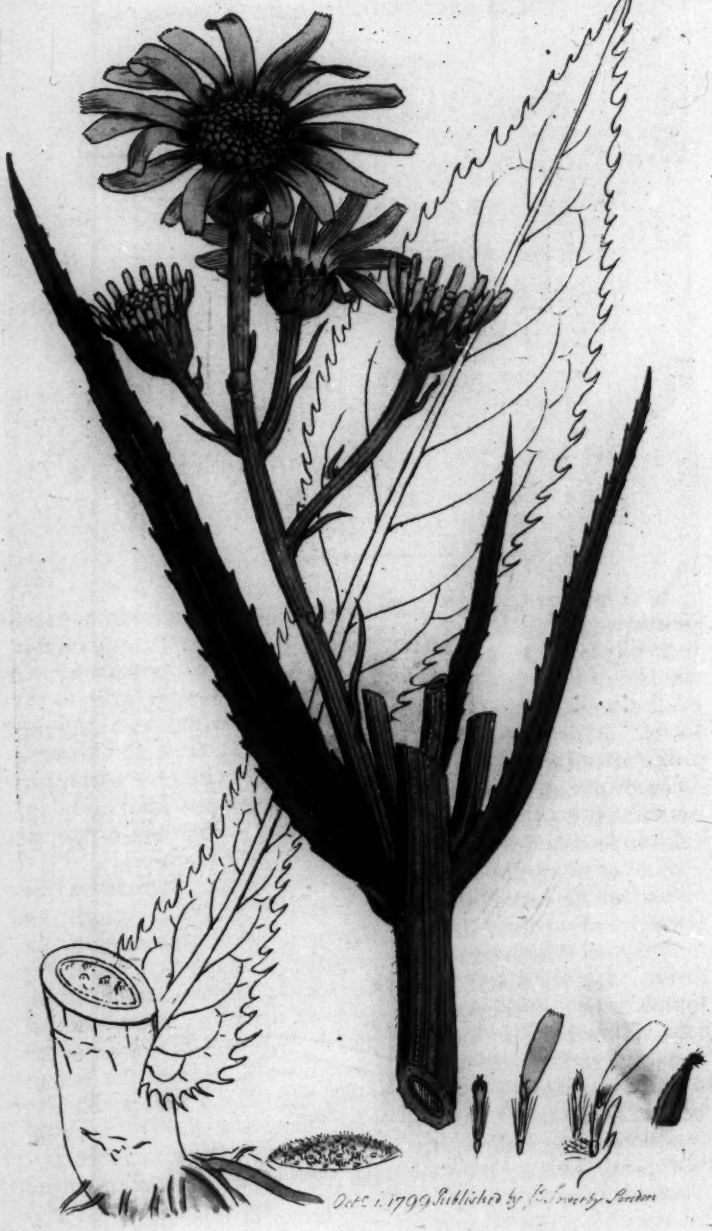
Alſine ſpuria puſilla repens, foliis Saxifragæ aureæ. *Raii Syn.* 352.

THIS curious and moſt diſtinct genus was named by Linnæus in honour of Dr. Humphrey Sibthorp, ſucceſſor to Dillenius in the Botanic chair at Oxford. His ſon, the late Profeſſor John Sibthorp, has richly earned his inheritance of the honour, by his indefatigable zeal in the purſuit of the ſame ſcience, to which indeed he fell a ſacrifice. To the writer of this, no ſtranger to his merit and abilities, the arrangement of his Grecian treaſures is now entruſted. His knowledge of the plants of his own country is diſplayed in a work publiſhed not very long before his death, and often cited by us, the *Flora Oxonienſis*.

The only genuine ſpecies of *Sibthorpia* is that before us, ſo that the ſpecific character is now ſuperfluous. It grows in ſhady places, and about ſprings in Cornwall and Devonſhire, where Mr. Sowerby gathered this ſpecimen. It flowers from June to Auguſt, and is perennial.

Root fibrous. Stems proſtrate, creeping to a great extent, branched, ſlender and delicate, leafy, hairy. Leaves alternate, on footſtalks, horizontal, kidney-ſhaped, with ſhallow diſtant notches, hairy. Flower-ſtalks axillary, ſolitary, ſhort, ſingle-flowered, hairy as well as the calyx. Corolla pale yellow, with a purpliſh tinge in the three upper ſegments. Stamina inclined to each ſide in pairs, very ſhort. Stigma peltate. Capſule containing but few ſeeds.





Oct.r 1.1799. Published by J.s Sowerby, London

# SENECIO paludoſus.

*Marſh Groundſel. Bird's-tongue.*

*SYNGENESIA Polygamia-ſuperflua.*

GEN. CHAR. *Recept.* naked. *Down* ſimple. *Cal.* cylindrical, ſcaly at the baſe; ſcales dead at the tip.

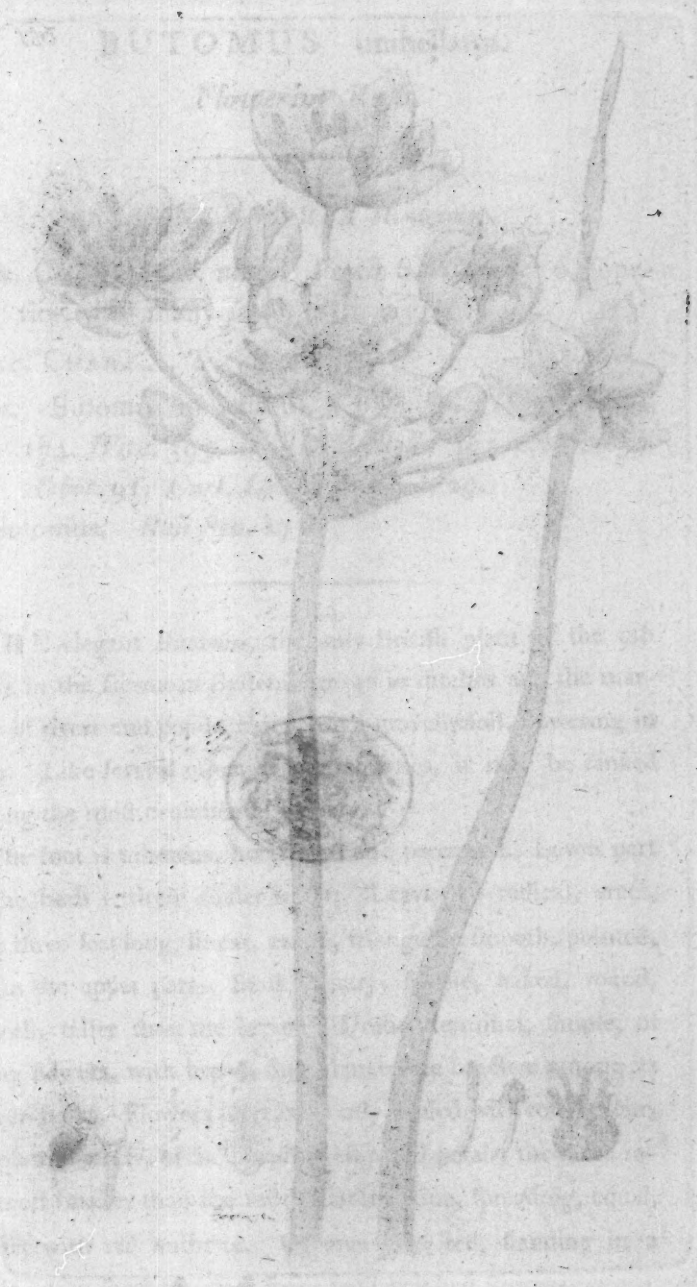
SPEC. CHAR. Radius ſpreading. Leaves ſword-ſhaped, ſharply ſerrated, ſomewhat woolly beneath. Stem perfectly ſtraight.

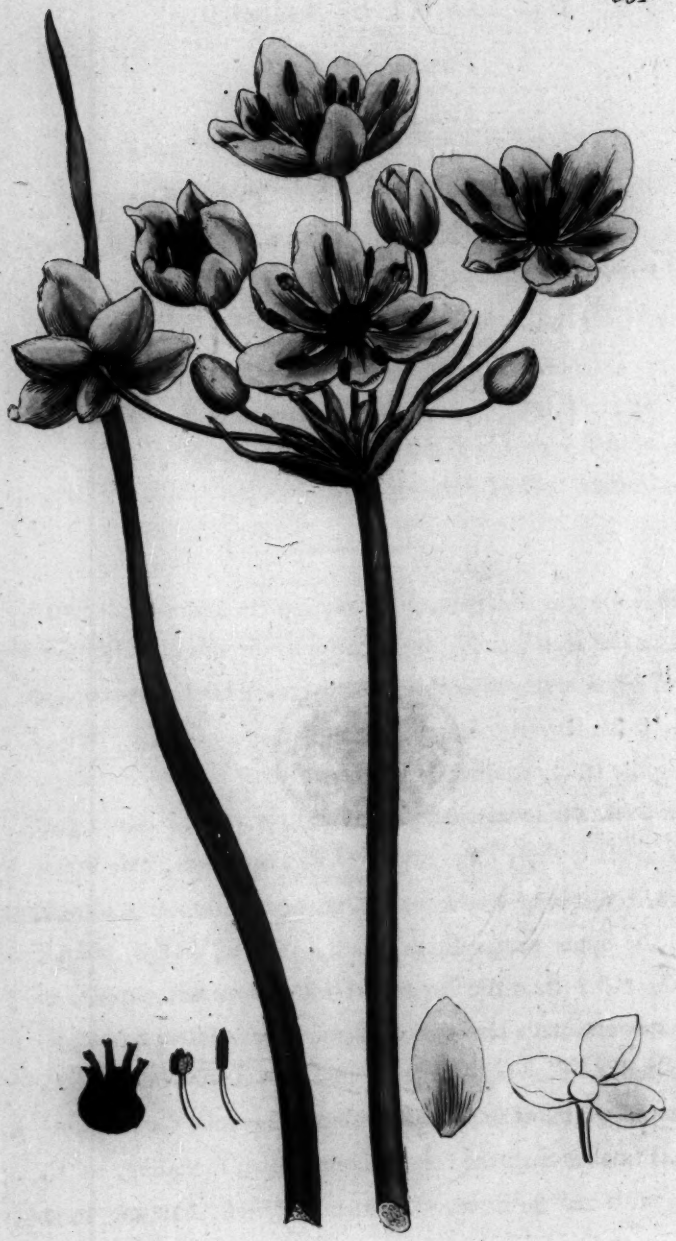
SYN. Senecio paludoſus. *Linn. Sp. Pl.* 1220. *Hudſ.* 366. *With.* 725. *Hull.* 187. *Relh.* 317.

Virgæ aureæ ſive Solidagini anguſtifoliæ affinis, Lingua avis Dalechampii. *Raii Syn.* 176.

NO plant more rare than the preſent has hitherto appeared in our work. Mr. Hudſon admitted it on the authority of Ray; but the place of growth he mentions, near Streatham ferry in the Iſle of Ely, has many a time been ſearched in vain, ſo that moſt botaniſts have ſuppoſed ſomething elſe had been miſtaken for it. Mr. Relhan however mentions Littleport, Chatteris, and Burwell fens as its ſtations; and our ſpecimen was found at Wangford near Brandon, by Francis Eagle jun. Eſq. and communicated by the Rev. Mr. Hemſted. It grows in deep inacceſſible fens and ditches, flowering in June and July.

Root of many long ſimple fibres, perennial. Stem from three to ſix feet or more in height, perfectly ſtraight, upright and ſimple, leafy, round, hollow, ſtriated, looſely clothed with cottony down, which likewiſe inveſts the young leaves and flower-ſtalks. Leaves ſcattered, numerous, ſeſſile, lanceolate, acute, ſharply ſerrated; narrow and entire at the baſe; ſmooth above; pale, and generally downy, beneath. Flowers in a kind of terminal corymbus, the lowermoſt ſtalks ariſing from the boſoms of the upper leaves. Bracteæ awl-ſhaped. Flowers above an inch in diameter, bright-yellow. Florets of the radius linear, five-toothed, ſpreading, but little recurved. Receptacle ſet with ſhort hairs between the ſeeds, as is often the caſe in many plants in which that part is ſaid to be naked, for theſe hairs are very different from the long chaffy ſcales to be found in ſome genera. The ſeed-down is rough.





# BUTOMUS umbellatus.

## *Flowering Ruſh.*

*ENNEANDRIA Hexagynia.*

GEN. CHAR. *Cal.* none. *Petals* 6. *Capſules* 6, ſuperior, with many *ſeeds*.

SPEC. CHAR. . . . .

SYN. Butomus umbellatus. *Linn. Sp. Pl.* 532. *Hudſ.* 174. *With.* 393. *Hull.* 88. *Relh.* 164. *Sibth.* 134. *Abbot.* 91. *Curt. Lond. faſc.* 1. *t.* 29.
Butomus. *Raii Syn.* 273.

THE elegant *Butomus*, the only Britiſh plant of the 9th Claſs in the Linnæan Syſtem, grows in ditches and the margins of rivers and ponds, chiefly on a gravelly ſoil, flowering in July. Like ſeveral other of our aquatics, it may be ranked among the moſt ornamental flowers.

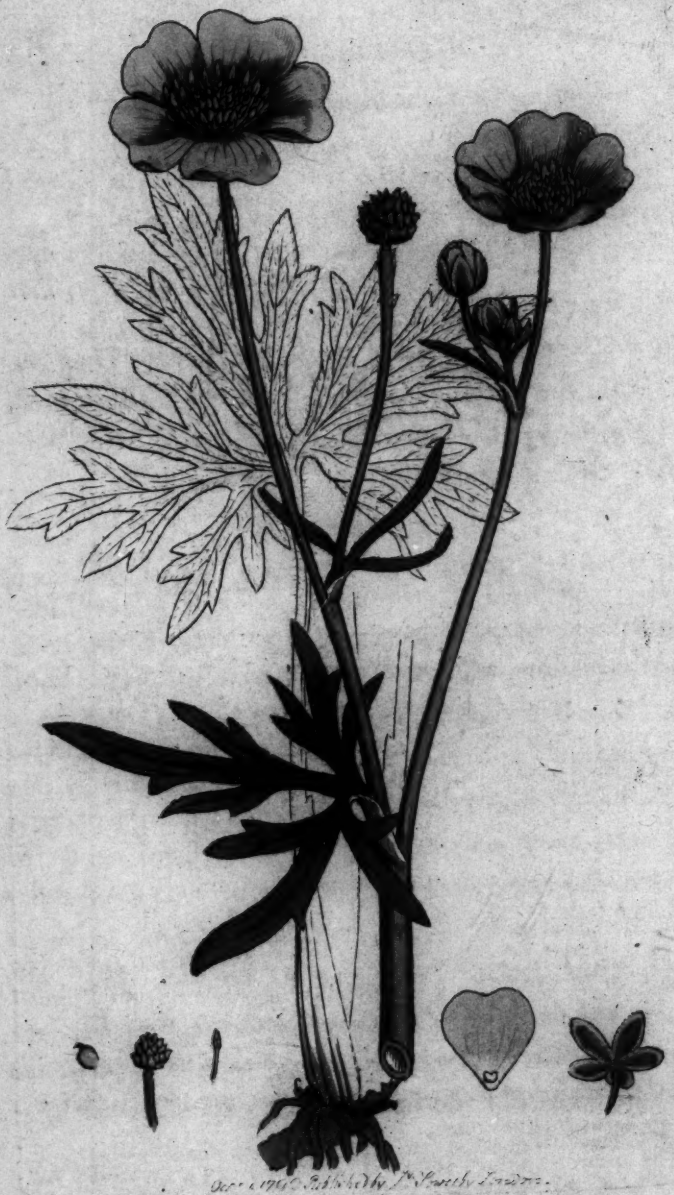
The root is tuberous, horizontal and perennial. Lower part of the herb entirely under water. Leaves all radical, erect, near three feet long, linear, entire, triangular, ſmooth, pointed, flat in the upper part. Stalk ſolitary, ſimple, naked, round, ſmooth, taller than the leaves. Umbel terminal, ſimple, of many flowers, with brown ſharp lanceolate bracteæ among its flower-ſtalks. Flowers large, variouſly ſhaded with roſe-colour, purple and white, of ſix ſpreading elliptical petals, the three innermoſt ſmaller than the reſt. Stamina nine, ſpreading, equal, white, with red antheræ. Germens ſix, red, ſtanding in a circle, with ſhort recurved ſtyles, and notched ſtigmas.

# RANUNCULUS acris.

*Upright Meadow Crowfoot.*

*POLYANDRIA*





Dec.1 1790. Published by J. Sowerby, London.

# RANUNCULUS acris.

## *Upright Meadow Crowfoot.*

*POLYANDRIA Polygynia.*

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5, with a honey-bearing pore on the inſide of the claw of each. *Seeds* naked.

SPEC. CHAR. Calyx ſpreading. Flower-ſtalks round and even. Leaves in three diviſions, with many ſegments; the upper ones linear.

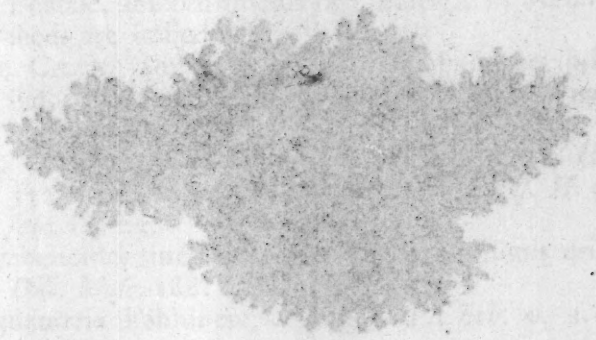
SYN. Ranunculus acris. *Linn. Sp. Pl.* 779. *Hudſ.* 241. *With.* 506. *Hull.* 121. *Relh.* 214. *Sibth.* 174. *Abbot.* 122. *Curt. Lond. faſc.* 1. *t.* 39. *Mart. Fl. Ruſt. t.* 30. *Woodv. Suppl. t.* 246.
R. pratenſis erectus acris. *Raii Syn.* 248.

COMMON in meadows and paſtures. Frequent with double flowers in gardens. It is perennial, and flowers in June or July.

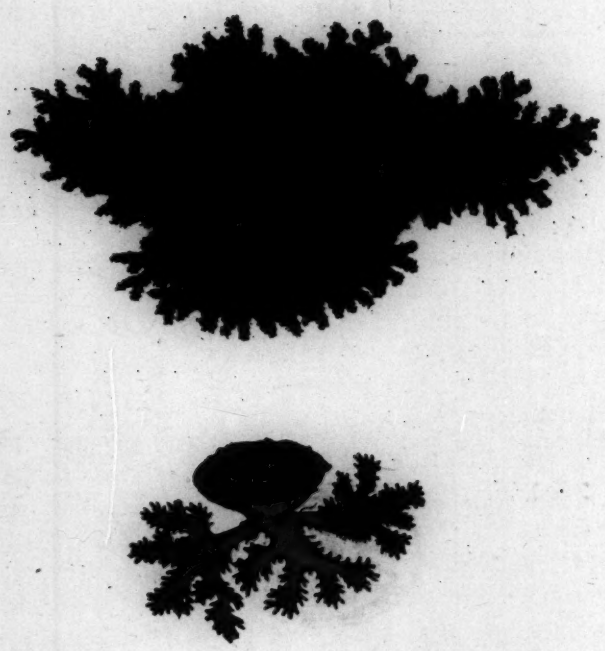
Root tuberous, with many long ſimple fibres. Stem upright, two feet high, round, clothed with cloſe-preſſed briſtles, branched above. Radical leaves on long upright hairy foot-ſtalks, in three or five deep diviſions, which are variouſly lobed and cut: ſtem-leaves nearly ſeſſile, and leſs cut; the uppermoſt in three entire linear lobes. Flower-ſtalks round and even, not furrowed, clothed with cloſe hairs. Calyx hairy, ſpreading, not reflexed. Petals of a ſhining yellow, the nectary covered with a notched ſcale.

This cannot be confounded with any other wild crowfoot. The ſcale of the nectary at once diſtinguiſhes it from *R. auricomus*; the ſpreading calyx from *bulboſus* and *birſutus*; the round flower-ſtalks from both thoſe and *repens*; while the ſmooth ſeeds prevent our miſtaking it for any ſpecies that has rough or muricated ones.

The name expreſſes its acrid qualities. It is generally ſuppoſed to be an uſeleſs weed. We have already hinted, p. 515, that ſuch plants may not be altogether ſo, when duly combined with more inſipid ones.




G.R. III.



Octr. 1799 Published by J.t Sowerby London

# LICHEN fahlunenſis.

## *Flat Black Rock Lichen.*

*CRYPTOGAMIA Algæ.*

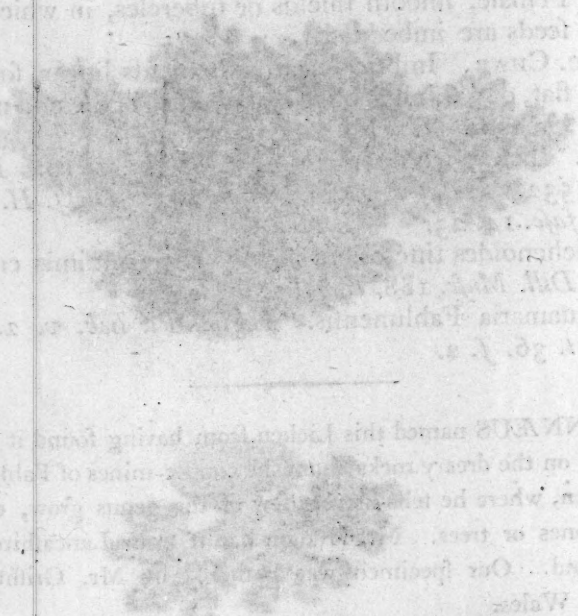
GEN. CHAR. Male, ſcattered warts.
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

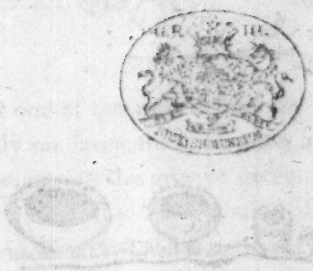
SPEC. CHAR. Imbricated; its ſegments linear, forked, flat, of a ſhining olive black; coal-black and naked beneath. Shields dark brown.

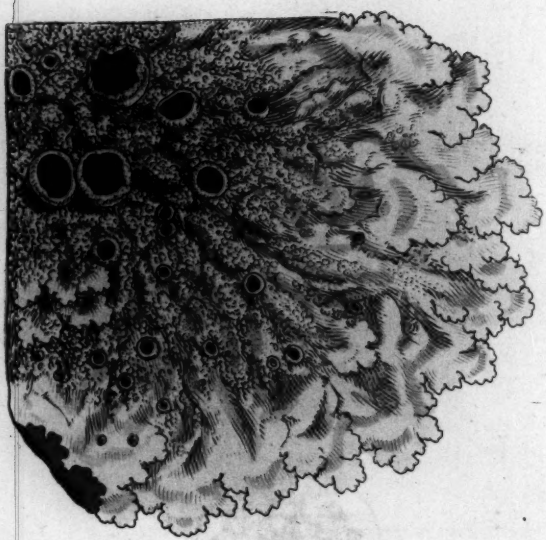
SYN. Lichen fahlunenſis. *Linn. Sp. Pl.* 1610. *Hudſ.* 532. *With. v.* 4. 30. *Hull.* 293. *Dickſ. H. Sicc. faſc.* 14. 23.
Lichenoides tinctorium atrum, foliis minimis criſpis. *Dill. Muſc.* 188. *t.* 24. *f.* 81.
Squamaria Fahlunenſis. *Hoffm. Pl. lich. v.* 2. 45. *t.* 36. *f.* 2.

LINNÆUS named this Lichen from having found it plentifully on the dreary rocks about the copper-mines of Fahlun in Sweden, where he tells us very few of the genus grow, either on ſtones or trees. Mr. Hudſon had it from Lancaſhire and Scotland. Our ſpecimen was gathered by Mr. Griffith in North Wales.

It grows in ſpreading flat patches, attached to the rocks rather by its under ſurface than by any preceptible roots, for it is quite ſmooth beneath, by which, if other marks were wanting, it might at once be known from every variety of *L. omphalodes, t.* 604. The under ſide is quite black, but not deſtitute of poliſh. The whole plant indeed is almoſt black when dry. When moiſt it aſſumes a very dark olive hue, ſmooth and ſhining. The ſegments are linear, numerous, flat or rather concave, by no means convex, by which laſt mark it is eſſentially diſtinguiſhed from *L. ſtygius*. The edges of the ſegments form an undulating line, and are black, either entire or finely toothed and granulated. Shields numerous, of a deep blackiſh cheſnut, having when young an elevated crenate margin, which is obliterated by age.









Octr. 1st 1769 Published by J.t Sowerby.

# LICHEN caperatus.

## *Wrinkled Sulphur Lichen.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. Male, ſcattered warts.
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Leafy, creeping, lobed, wrinkled, of a pale ſulphur-colour; its margin rounded and crenate. Shields bright cheſnut, with a mealy edge.

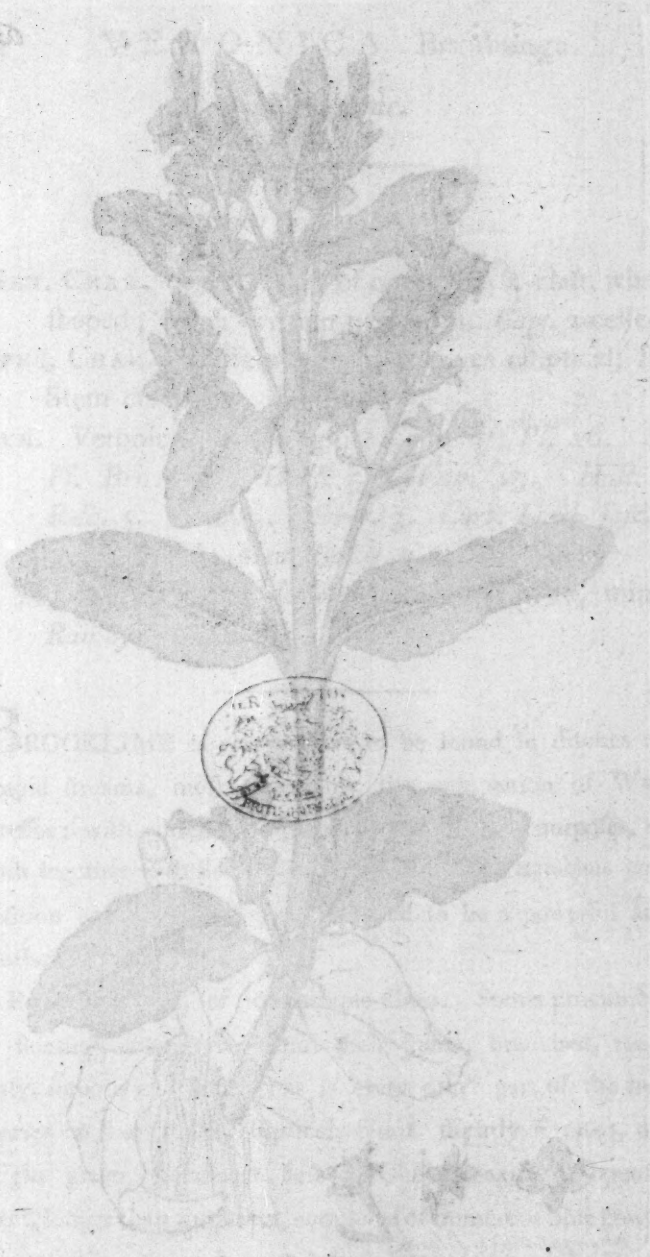
SYN. Lichen caperatus. *Linn. Sp. Pl.* 1614. *Hudſ.* 543. *With. v.* 4. 58. *Hull.* 297. *Relh.* 433. *Sibth.* 330. *Abbot.* 264. *Dickſ. Dr. Pl.* 22.
Lichenoides cruſtâ foliosâ, ex cinereo et luteo vireſcente ſupernè, infernè nigrâ et lævi. *Raii Syn.* 73.
L. caperatum, roſaceè expanſum, e ſulphureo virens. *Dill. Muſc.* 193. *t.* 25. *f.* 97.
Platiſma caperatum. *Hoffm. Pl. lich. v.* 2. 50. *t.* 38, 39, & 42. *f.* 1.

THIS is one of our moſt handſome Lichens. It occurs not unfrequently on large trees, forming a ſulphur-coloured patch, conſpicuous among the grey or green hues that uſually clothe their bark; but the fructification is extremely rare. Mr. Sowerby and Mr. D. Turner gathered our very fine ſpecimen in Cornwall, on large granite ſtones. Hoffmann's *t.* 39 is one of the moſt admirable figures any where to be ſeen, and much preferable to what he has copied from Jacquin's Collectanea.

L. *căperatus* is ſo named from its being tranſverſely wrinkled, like a goat's horn, which is ſcarcely to be ſeen but in old ſpecimens, and is not peculiar to the ſpecies. It forms patches often a foot in diameter, lying cloſe to the bark or ſtone, deſtitute of hairs on both ſides; of an elegant pale ſulphur-colour above, frequently powdery or granulated; black beneath. The ſhields are a little elevated, externally of the colour of the leaf, ſmooth towards the baſe, mealy or granulated at the margin; their inſide of a bright reddiſh cheſnut.

# LICHEN capertus.

## Wrinkled Sulphur Lichen.





Oct.1.1799 Published by J.t Sowerby.

# VERONICA Becabunga.

## *Brooklime.*

*DIANDRIA Monogynia.*

GEN. CHAR. *Cor.* inferior, of one petal, 4-cleft, wheel-ſhaped; lower diviſion narroweſt. *Capſ.* 2-celled.

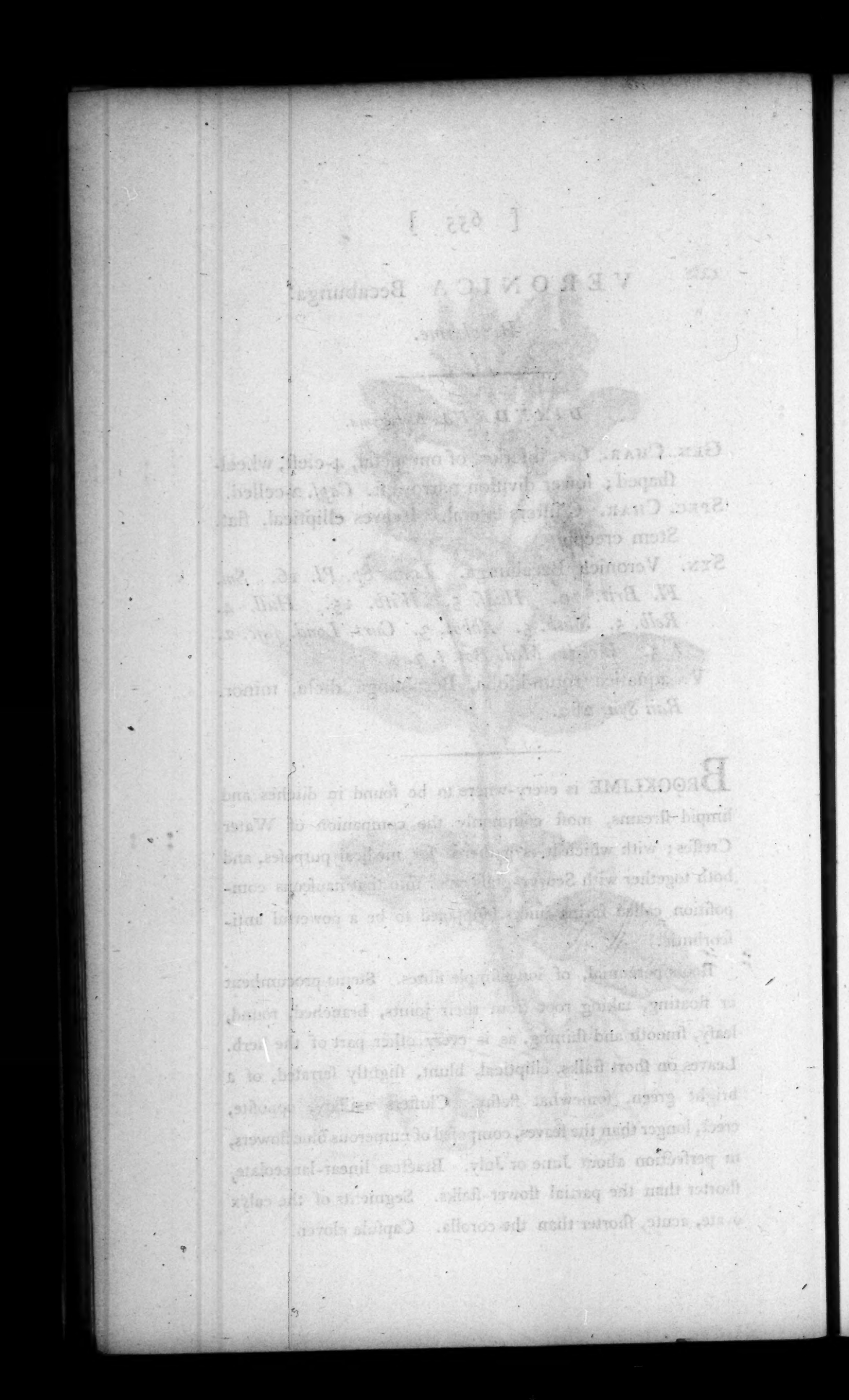
SPEC. CHAR. Cluſters lateral. Leaves elliptical, flat. Stem creeping.

SYN. Veronica Becabunga. *Linn. Sp. Pl.* 16. *Sm. Fl. Brit.* 20. *Hudſ.* 5. *With.* 15. *Hull.* 4. *Relh.* 5. *Sibth.* 5. *Abbot.* 3. *Curt. Lond. faſc.* 2. *t.* 3. *Woodv. Med. Bot. t.* 7.

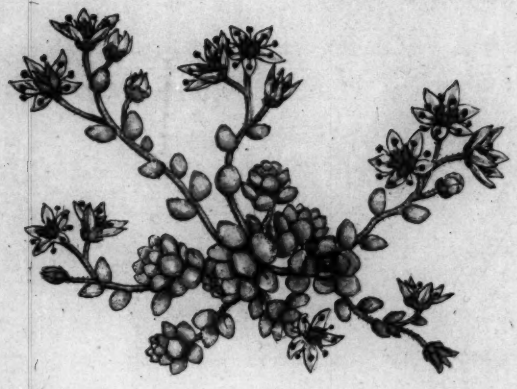
V. aquatica rotundifolia, Becabunga dicta, minor. *Raii Syn.* 280.

BROOKLIME is every-where to be found in ditches and limpid ſtreams, moſt commonly the companion of Water Creſſes; with which it is gathered for medical purpoſes, and both together with Scurvy-graſs enter into that nauſeous compoſition called ſpring-juices, ſuppoſed to be a powerful anti-ſcorbutic.

Roots perennial, of long ſimple fibres. Stems procumbent or floating, taking root from their joints, branched, round, leafy, ſmooth and ſhining, as is every other part of the herb. Leaves on ſhort ſtalks, elliptical, blunt, ſlightly ſerrated, of a bright green, ſomewhat fleſhy. Cluſters axillary, oppoſite, erect, longer than the leaves, compoſed of numerous blue flowers, in perfection about June or July. Bracteæ linear-lanceolate, ſhorter than the partial flower-ſtalks. Segments of the calyx ovate, acute, ſhorter than the corolla. Capſule cloven.









Oct.r 1.1799 Published by J.s Sowerby, London.

# SEDUM dasyphyllum.

*Thick-leaved Stonecrop.*

*DECANDRIA Pentagynia.*

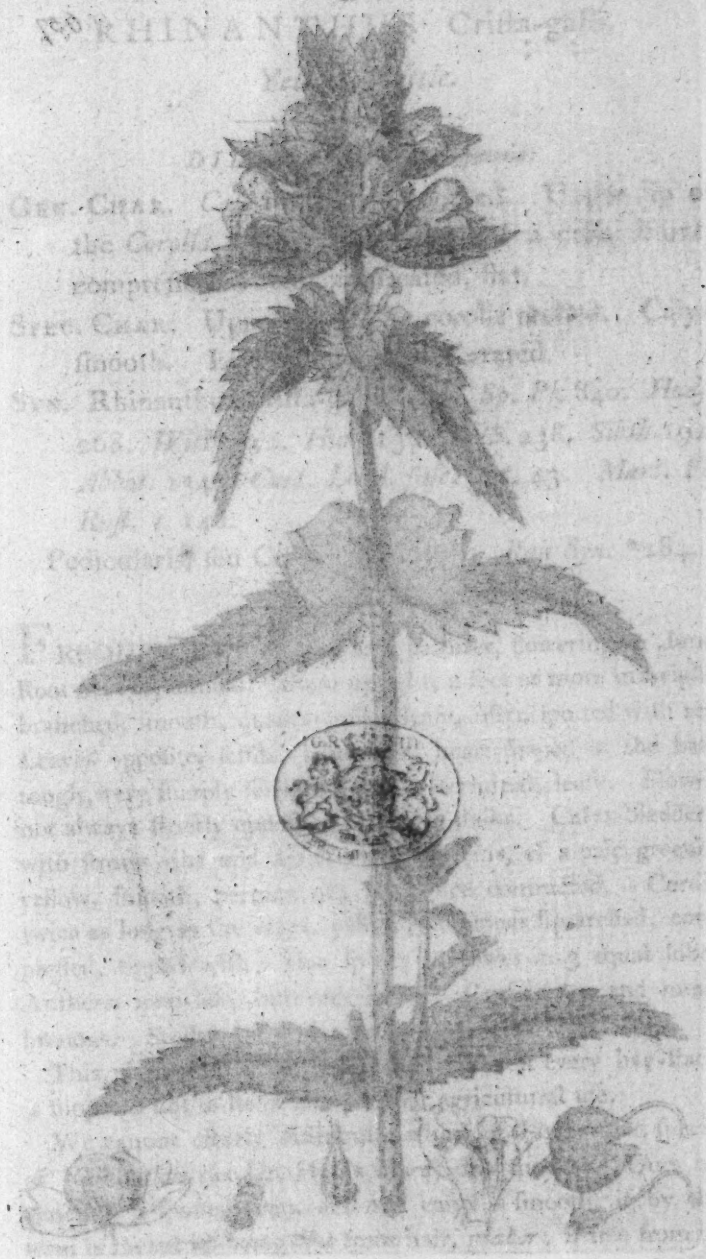
GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectariferous scales at the base of the germen. *Capsules* 5.

SPEC. CHAR. Leaves opposite, ovate, obtuse, fleshy. Stem weak. Panicle glutinous.

SYN. Sedum dasyphyllum. *Linn. Sp. Pl.* 618. *Hudſ.* 197. *With.* 428. *Hull.* 99. *Relh.* 179. *Sibth.* 144. *Abbot.* 98. *Curt. Lond. faſc.* 3. *t.* 26.
S. minus circinato folio. *Dill. in Raii Syn.* 271.

THIS pretty little *Sedum* was pointed out to us at Clifton, near Briſtol, by Mr. Dyer. It grows on walls or rocks, and is often to be ſeen about London, as at Hammerſmith, Kew and Chelſea. When once introduced into a garden it propagates itſelf freely upon walls, waſte places, and about garden-pots. We believe it to be perennial, though it ſo frequently diſappears in one ſpot, and re-appears in another, we have ſometimes thought it only biennial. It flowers copiouſly in June.

Root of ſmall white fibres. Stems thread-like, creeping, weak and proſtrate, being quite weighed down by the leaves, except the flowering branches, which are panicled, downy and viſcid. The leaves are oppoſite, cloſely imbricated, ſeſſile, ovate, glaucous, extremely thick and juicy; thoſe on the flowering branches only being alternate. Panicles terminal, ſpreading, of a few flowers. Calyx downy, viſcid. Petals white, with a purple keel. Antheræ dark red. Capſules often more than five.





Jan.y 1. 1799 Published by J.t Sowerby

# RHINANTHUS Criſta-galli.

## *Yellow Rattle.*

*DIDYNAMIA Angioſpermia.*

GEN. CHAR. *Cal.* inflated, 4-toothed. Upper lip of the *Corolla* compreſſed. *Capſ.* of 2 cells, blunt, compreſſed. *Seeds* imbricated, flat.

SPEC. CHAR. Upper lip of the corolla arched. Calyx ſmooth. Leaves lanceolate, ſerrated.

SYN. Rhinanthus Criſta-galli. *Linn. Sp. Pl.* 840. *Hudſ.* 268. *With.* 542. *Hull.* 137. *Relh.* 238. *Sibth.* 192. *Abbot.* 134. *Curt. Lond. faſc.* 5. *t.* 43. *Mart. Fl. Ruſt. t.* 148.

Pedicularis, ſeu Criſta galli lutea. *Raii Syn.* *284.

FREQUENT in meadows and paſtures, flowering in June. Root fibrous, annual. Stem upright, a foot or more in height, branched, ſmooth, quadrangular, leafy, often ſpotted with red. Leaves oppoſite, ſeſſile, lanceolate, heart-ſhaped at the baſe, rough, very ſharply ſerrated. Spike terminal, leafy. Flowers not always ſtrictly oppoſite, on ſhort ſtalks. Calyx bladdery, with ſtrong ribs and a net-work of veins, of a pale greeniſh yellow, ſmooth, permanent; its orifice contracted. Corolla twice as long as the calyx, yellow; its upper lip arched, compreſſed, tipped with 2 blue ſpots; its lower in 3 equal lobes. Antheræ awn-leſs, but very hairy. Capſule dry and membranous. Seeds with a membranous border.

This plant, though to be found in almoſt every hay-ſtack, is ſuppoſed not to be of any peculiar agricultural uſe.

We cannot clearly diſtinguiſh which of Ehrhart's 2 ſpecies of *Rhinanthus* (ſee Dr. Hull's *Flora*) this may be. Ours has generally a ſpotted ſtem, and the calyx is ſmooth, if by that term is meant its being free from hair, *glaber*; if free from inequality, *lævis*, it is not ſo. The ſtyle is in an early ſtate ſhorter than the corolla, afterwards often longer.

We know not Dillenius's plant, the β of Hudſon, nor whether it may be Ehrhart's *R. major* or *minor*.





Nov.r 1.1799. Published by J.s Sowerby Londn.

# ANTIRRHINUM Linaria.

## *Yellow Toad-flax.*

*DIDYNAMIA Angiospermia.*

GEN. CHAR. *Cal.* 5-leaved. *Cor.* with a prominence at its base pointing downwards and bearing honey. *Capſ.* 2-celled.

SPEC. CHAR. Leaves linear-lanceolate, crowded. Stem erect. Spikes terminal. Flowers imbricated. Calyx ſmooth, ſhorter than the ſpur.

SYN. Antirrhinum Linaria. *Linn. Sp. Pl.* 859. *Hudſ.* 273. *With.* 551. *Hull.* 139. *Relh.* 243. *Sibth.* 195. *Abbot.* 138. *Curt. Lond. faſc.* 1. *t.* 47. *Mart. Fl. Ruſt. t.* 93. *Woodv. Suppl. t.* 221.

Linaria lutea vulgaris. *Raii Syn.* *281.

THE uniformity of our plan requires the exhibition of this plant in a natural ſtate, though we have already figured its curious variety the *Peloria*, *t.* 260. We have the leſs reluctance to add ours to the many plates of *A. Linaria* already exiſting, as we have the good fortune of being able to repreſent from nature one of its flowers only, the lowermoſt on our ſpike, advancing a ſtep towards the *Peloria*. This, if any new proof were wanting, would abſolutely decide that production to be merely a variety.

The common yellow Toad-flax grows frequently in hedges and the borders of fields, in a barren gravelly ſoil, and though often a troubleſome weed, muſt be allowed to be a flower of great beauty. It bloſſoms in June and July. The root is creeping, whitiſh, a little woody. Stems erect, 2 feet high, round, leafy, ſcarcely branched. Leaves linear, or inclining to lanceolate, entire, ſpreading, very little glaucous, thickly ſet without any order. Spike terminal, erect, many-flowered. Bracteæ lanceolate. Calyx ſmooth. Corolla large, bright-yellow, ringent, cloſed, with a downy orange-coloured mouth. Spur awl-ſhaped, pointed, 5 times as long as the calyx.

# ANTIRRHINUM Linaria.

## Yellow Toad-flax.

DIDYNAMIA Angiospermia.

Gen. Char. Cal. 5-leaved. Cor. with a prominence at its base pointing downwards and bearing honey. Cap. 2-celled.

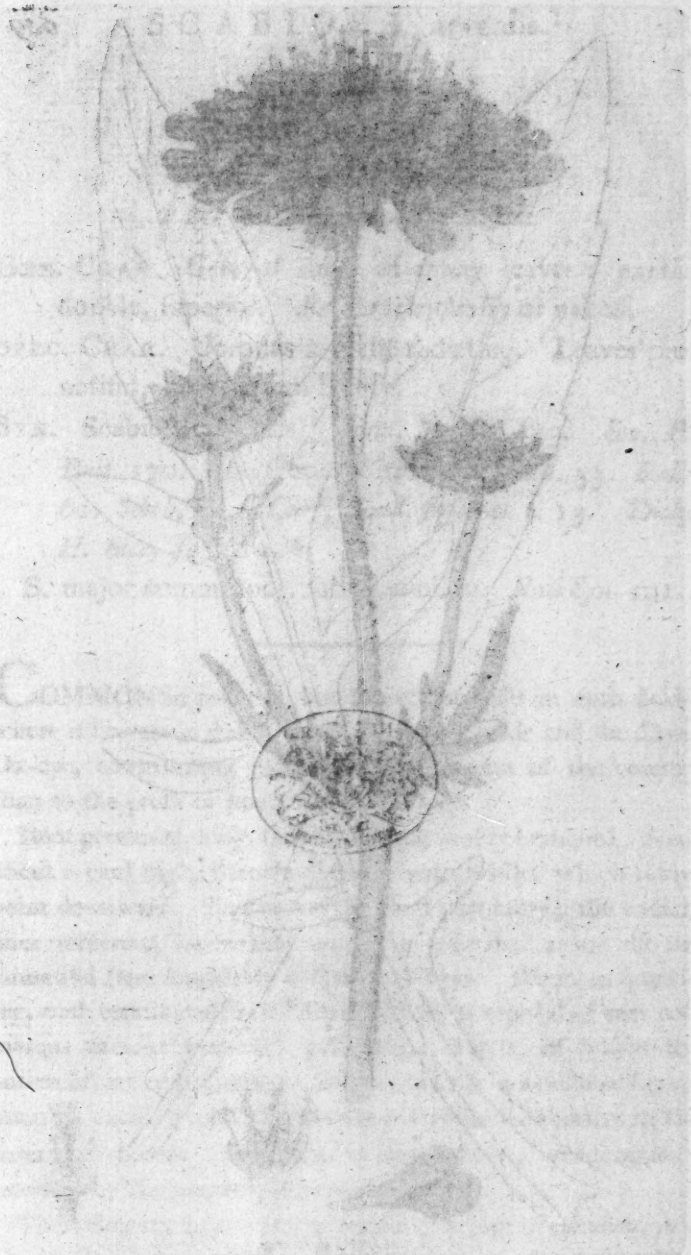
Spec. Char. Leaves linear-lanceolate, crowded. Stems erect. Spikes terminal. Flowers imbricated. Calyx smooth, shorter than the cor.

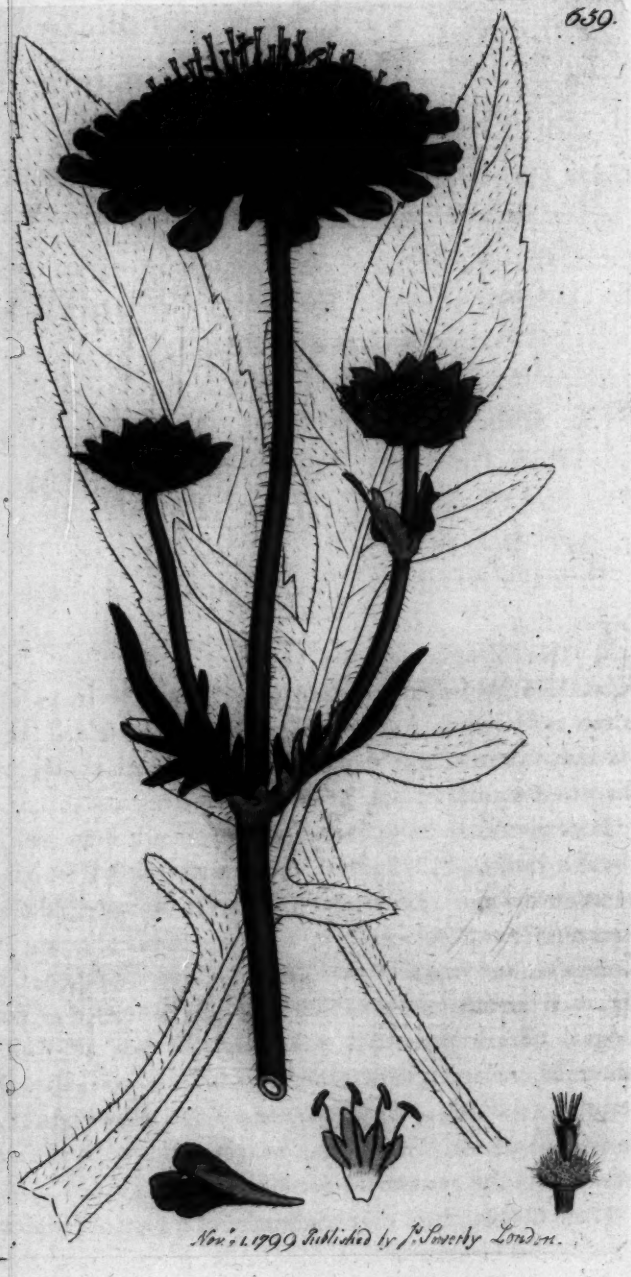
Syn. Antirrhinum Linaria. Linn. Sp. Pl. 859. Huds. 273. Sm. Fl. Brit. 751. Eng. Bot. t. 159. Reich. 2459. Schk. 195. Hoffm. 1. 38. Curt. Lond. fasc. 1. t. 47. Mart. Pl. Rar. t. 93. Woodv. Med. Bot. t. 221.

Linaria lutea vulgaris. Ray Syn. 382.

THE uniformity of our plan requires the exhibition of this plant in a natural state, though we have already figured its curious variety the Peloria, t. 285. We have the less reluctance to add cuts to the many places of reference already existing, as we have the good fortune at length to present from nature the of its flowers only, the separation of our figure, advancing a step towards the Peloria. This, if any new proof were wanting, would abundantly decide that production to be merely a variety.

The common yellow Toad-flax grows frequently in hedges and the borders of fields, in a loamy gravelly soil, though often a troublesome weed, must be allowed to be a flower of great beauty. It blossoms in June and July. The root is creeping, with a little woody. Stems erect, a foot high, round, hairy, scarcely branched. Leaves linear, or inclining to lanceolate, entire, spreading, very little glaucous, thickly set without any order. Spike terminal, erect, many-flowered. Bracteæ lanceolate. Calyx smooth. Corolla large, bright-yellow, ringent, closed, with a downy orange-coloured mouth. Spur awl-shaped, pointed, 5 times as long as the calyx.





Nov.1 1799 Published by J.Sowerby London.

# SCABIOSA arvenſis.

## *Field Scabious.*

*TETRANDRIA Monogynia.*

GEN. CHAR. *General calyx* of many leaves; *partial* double, ſuperior. *Receptacle* chaffy or naked.

SPEC. CHAR. Corollas 4-cleft, radiating. Leaves pinnatifid, cut. Stem briſtly.

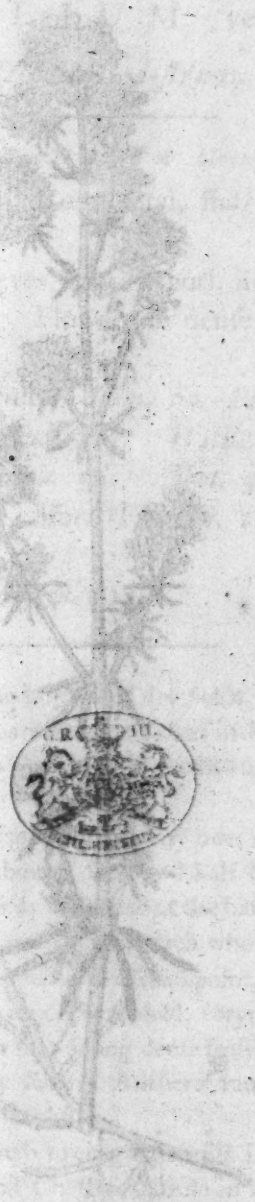
SYN. Scabioſa arvenſis. *Linn. Sp. Pl.* 143. *Sm. Fl. Brit.* 170. *Hudſ.* 62. *With.* 183. *Hull.* 33. *Relh.* 60. *Sibth.* 55. *Curt. Lond. faſc.* 4. *t.* 13. *Dickſ. H. Sicc. faſc.* 12. 6.

S. major communior, folio laciniato. *Raii Syn.* 191.

COMMON in paſtures, but more eſpecially in corn-fields, where it flowers in July, mixed with the Cockle and the Great Ox-eye, contributing more to the ornament of the country than to the profit or honour of the farmer.

Root perennial, long, ſpindle-ſhaped, moſtly branched. Stem about a yard high, branched, rough with briſtles which rather point downward. Leaves for the moſt part hairy; the radical ones numerous, lanceolate, more or leſs ſerrated, as are alſo the pinnatifid (and frequently cut) upper leaves. Branches ſpreading, each terminated by a ſolitary flower, compoſed of very numerous tubular four-cleft pale-purple florets, of which the outermoſt are larger, labiate, and give the whole a radiated figure. Stamina capillary, with fleſh-coloured antheræ, abortive in the outermoſt florets. Seed one to each floret, quadrangular, crowned by the permanent partial calyx.

Theſe flowers, held over the ſmoke of a pipe of tobacco, in a few minutes become of a moſt beautiful green, from the alkaline nature of the ſmoke, to which their delicate purple is peculiarly ſenſible.





Nov.1.1795. Published by J.Sowerby London.

# GALIUM verum.

## *Yellow Bed-ſtraw.*

*TETRANDRIA Monogynia.*

GEN. CHAR. *Cor.* of one petal, flat, ſuperior. *Seeds* two, roundiſh.

SPEC. CHAR. Leaves 8 in a whorl, linear, channelled, entire, rough. Flowers in denſe panicles. Fruit ſmooth.

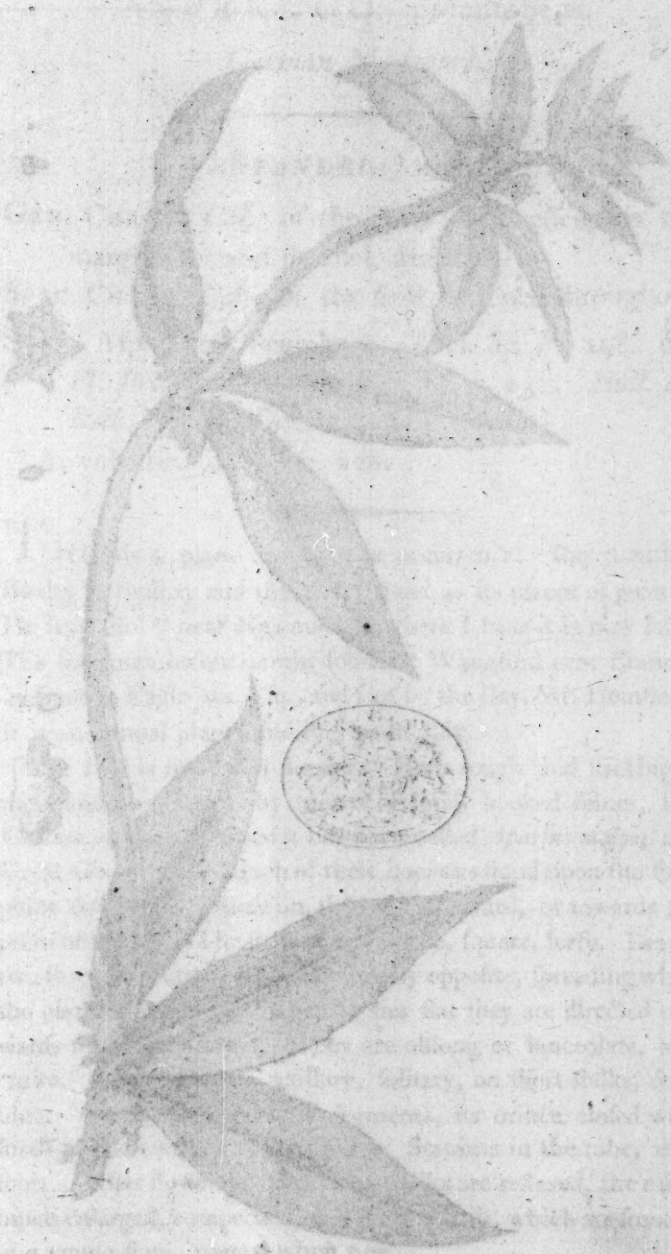
SYN. Galium verum. *Linn. Sp. Pl.* 155. *Sm. Fl. Brit.* 178. *Hudſ.* 69. *With.* 191. *Hull.* 36. *Relh.* 66. *Sibth.* 59. *Abbot.* 34. *Curt. Lond. faſc.* 6. *t.* 13. *Mart. Fl. Ruſt. t.* 54. *Dickſ. H. Sicc. faſc.* 17. 4.

G. luteum. *Raii Syn.* 224.

FREQUENT in the borders of dry fields, and on little buſhy hills, which it enlivens with a profuſion of bright-yellow flowers, diffuſing a honey-like rather oppreſſive ſcent, in the months of July and Auguſt.

Root perennial, creeping, of a tawny hue, evincing its affinity to Madder. Stems about a foot and half high, ſeldom quite upright, unleſs ſupported; branched at the baſe; panicled above; roundiſh, ſmooth. Leaves eight in each whorl, pointing downward, linear, entire, tipped with a ſmall point, dark green, rough above. Flower-ſtalks much branched, corymboſe, many-flowered, cluſtered together into a long denſe leafy panicle. Flowers yellow. Stamina very ſhort. Antheræ turning brown in decay. Fruit ſmooth, blackiſh.

The power of this herb to coagulate milk is well known, and Gerarde tells us the beſt Cheſhire cheeſe in his time was made with it. Ray relates, on the authority of an old Daniſh writer, that a pleaſant acid liquor is procured from the flowers by diſtillation in a moderate ſand-heat. From ſome handfulls of the flowery tops the quantity of 3 ounces of this liquor, a kind of vinegar, was obtained.





Nov.r 1. 1799 Published by J.t Sowerby London.

# ASPERUGO procumbens.

*German Madwort.*

*PENTANDRIA Monogynia.*

GEN. CHAR. *Cal.* of the fruit compreſſed, its two margins flat and parallel, ſinuated.

SPEC. CHAR. *Calyx* of the fruit flattened throughout.

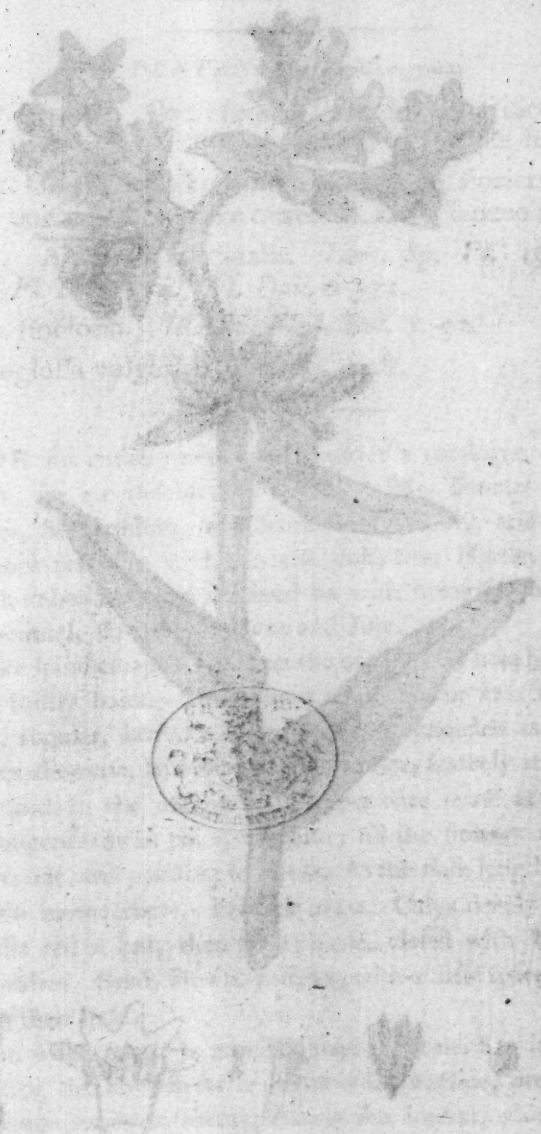
SYN. Aſperugo procumbens. *Linn. Sp. Pl.* 198. *Sm. Fl. Brit.* 220. *Hudſ.* 82. *With.* 231. *Hull.* 47. *Relh.* 79. *Fl. Dan. t.* 552.

A. vulgaris. *Raii Syn.* 228.

THIS is a plant of very rare occurrence. Ray mentions Boxley in Suſſex, and the Holy Iſland as its places of growth. He ſays alſo "near Newmarket, where I hear it is now loſt." The ſpecimen before us was found at Wangford near Brandon by Francis Eagle jun. Eſq., and ſent by the Rev. Mr. Hemſted*. It is an annual plant, and flowers in July.

The root is ſmall and ſlender. Herb rough and ſticking to the hands or clothes by means of ſmall hooked ſpines, like *Galium Aparine*; hence it has been called *Aparine major*, and Great Gooſe-graſs. Such of theſe hooks as ſtand upon the ſtem point downward; thoſe on the leaves forward, or towards the point of the leaf. The ſtems are proſtrate, ſquare, leafy. Leaves two three or four together, not exactly oppoſite, ſpreading when the plant is ſupported, when it lies flat they are directed upwards from the ground. They are oblong or lanceolate, and entire. Flowers ſmall, axillary, ſolitary, on ſhort ſtalks, deep blue. Corolla in 5 rounded ſegments, its orifice cloſed with ſmall purple concave blunt valves. Stamina in the tube, very ſhort. After flowering, the flower-ſtalks are reflexed, the calyx much enlarged, compreſſed, enfolding 4 ſeeds, which are ſmooth in a young ſtate, rugged when ripe.

* Mr. Hemſted informs us the *Senecio paludoſus*, *t.* 650, was gathered in Lakenheath fen, not far from Wangford, by himſelf and Mr. Eagle.





# ANCHUSA officinalis.
## *Common Alkanet.*

*PENTANDRIA Monogynia.*

GEN. CHAR. *Cor.* funnel-ſhaped: its orifice cloſed with valves. *Seeds* hollowed out at the baſe.

SPEC. CHAR. Spikes imbricated, the flowers all on one ſide. Bracteæ ovate. Leaves lanceolate.

SYN. Anchuſa officinalis. *Linn. Sp. Pl.* 191. *Sm. Fl. Brit.* 214. *Fl. Dan. t.* 572.

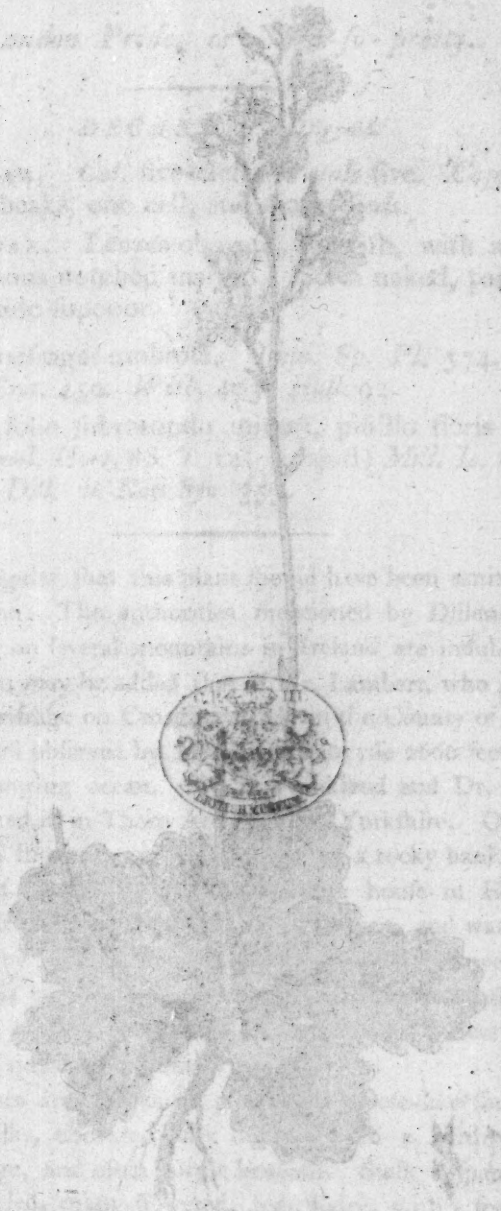
A. tinctoria. *Woodv. Med. Bot. t.* 92.

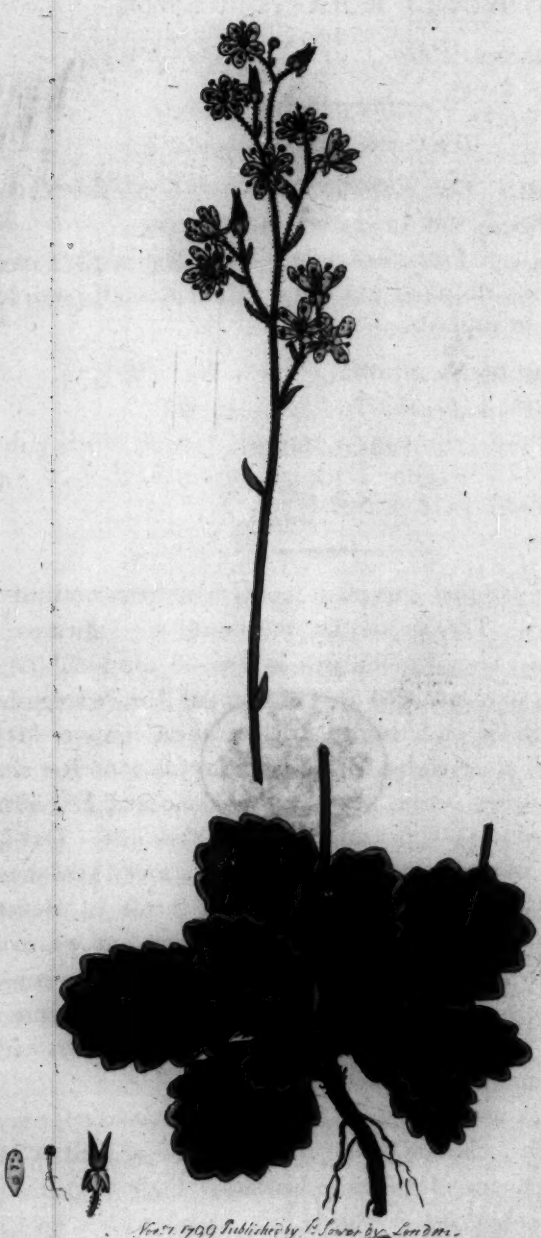
Bugloſſa vulgaris. *Ger. em.* 798.

FOR this entirely new acceſſion to the catalogue of Britiſh plants, we are indebted to the Rev. Mr. Thomas Butt, of Areley, Staffordſhire, who found it plentifully, and to all appearance perfectly wild, on the links near Hartley Pans in Northumberland, and favoured us with living ſpecimens. It is perennial, flowering in June and July.

Root ſpindleſhaped, black on the outſide. Whole herb rough with briſtly hairs. Stem about 18 inches or two feet high, erect, angular, leafy, a little branched, panicled at the top. Leaves alternate, lanceolate, acute, entire, ſcarcely at all waved or criſped in the margin; the upper ones ovate at the baſe. Spikes generally in pairs, revolute; all the flowers thickly ſet on one ſide, and pointing upwards. As the ſtalk lengthens, they become more remote. Bracteæ ovate. Calyx deeply five-cleft. Corolla red at firſt, then deep purple, cloſed with hairy concave valves. Seeds brown, pointed, with a little ſpace hollowed out at their baſe.

The whole plant is mucilaginous; but neither its ſenſible qualities, nor any effects it produces in practice, are ſufficient to account for its antient reputation as a cordial, which, as Dr. Woodville well remarks, (*Suppl. p.* 10), is rather to be attributed to the wine in which it was adminiſtered. It is neceſſary to obſerve that *t.* 92 of the *Medical Botany* repreſents our plant, the real *A. tinctoria* being very different. *T.* 214 of the *Supplement* to the ſame work ſeems rather *A. undulata* of Linnæus.





Nov.r 1790 Published by J.t Sowerby Londn.

# SAXIFRAGA umbroſa.

## *London Pride, or None-ſo-pretty.*

*DECANDRIA Digynia.*

GEN. CHAR. *Cal.* five-cleft. *Petals* five. *Capſ.* with two beaks, one cell, and many *ſeeds*.

SPEC. CHAR. Leaves obovate, bluntiſh, with a cartilaginous notched margin. Stem naked, panicled. Capſule ſuperior.

SYN. Saxifraga umbroſa. *Linn. Sp. Pl.* 574. *Sm. Fl. Brit.* 450. *With.* 403. *Hull.* 92.

Geum folio ſubrotundo minori, piſtillo floris rubro. *Magnol. Hort.* 88. *t.* 14. (majori) *Mill. Ic. t.* 141. *f.* 2. *Dill. in Raii Syn.* 355.

IT is ſingular that this plant ſhould have been omitted by Mr. Hudſon. The authorities mentioned by Dillenius for its growing on ſeveral mountains in Ireland are indubitable; and to them may be added that of Mr. Lambert, who gathered this Saxifrage on Croagh Patrick in the County of Mayo, a conical hill obſerved by Mr. Kirwan to riſe 2666 feet above the neighbouring ocean. Sir T. Frankland and Dr. White have gathered it in Thorp Arch woods, Yorkſhire. Our ſpecimen grew in a truly wild ſituation, on a rocky bank near a rivulet, half a mile weſt of Mrs. Foſter's houſe in Heſleton Gill, betwixt Arncliffe and Horton in Craven, and was communicated by Mr. W. Bingley. It is perennial, flowering in July; and is well known in gardens, particularly for thriving in London better than moſt plants, where it flowers earlier than on its native mountains.

The leaves are all radical, growing in a roſe-like form, on flat foot-ſtalks, obovate, quite ſmooth, with a hard whitiſh crenate edge, and often purple beneath. Stalk a ſpan high, erect, panicled, many-flowered, red, hairy, with a few ſmall alternate bracteæ. Flowers upright. Calyx at length reflexed. Petals nearly elliptical, white or fleſh-coloured, moſt beautifully ſpotted with yellow and dark red. Germen altogether ſuperior, red. Capſule inflated, tipped with purple. It cannot be confounded with any other Britiſh ſpecies.

# SAXIFRAGA cernua.

## Drooping Bulbous Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* two-beaks, one cell, and many *seeds.*

SPEC. CHAR. Leaves kidney-shaped, palmate. Stem bearing bulbs. *Germen* superior. Petals blunt.

SYN. Saxifraga cernua *Linn. Sp. Pl.* 577. *Fl. Lapp.* t. 2. f. 4. *Sm. Fl. Brit.* 453. *Dickf. Tr. of Linn. Soc.* v. 2. 290. *Hudson. Hull.* 93.

MR. DICKSON first gathered this rare alpine plant on the summit of Ben Lawers. The impossibility of procuring fresh specimens from thence, has made us thankfully accept this from the garden of the Rev. Mr. Bale, F. L. S. at Wiston, Suffex. Though a cultivated one, it exhibits the true wild appearance, [illegible] in those from Scotland and Lapland [illegible] flowers in July or August.

Root a knot [illegible] branched black fibres. Stem four or [illegible] round, leafy, mostly smooth, green [illegible] flowered, sometimes branched. Leaves [illegible] footstalks, kidney-shaped, lobed in a palmate manner, [illegible] succulent, smooth; the upper ones bearing in the [illegible] little purple scaly bulbs, which falling to the ground [illegible] new plants. Flower terminal, solitary, white, [illegible] drooping. Segments of the calyx [illegible] ovate, clothed with [illegible] hairs. Petals [illegible] blunt, [illegible] three-nerved, the nerves united above the base, [illegible] before they reach the top. Germen [illegible] green.

The figure in Fl. Dan. t. 1001 seems rather to belong to our plant than [illegible], which has the ovate petals, and always a simple stem. Linnæus did not distinguish them.



May 1. 1799. Published by J. Sowerby London.

# SAXIFRAGA cernua.

## *Drooping Bulbous Saxifrage.*

*DECANDRIA Digynia.*

GEN. CHAR. *Cal.* five-cleft. *Petals* 5. *Capſ.* with two beaks, one cell, and many *ſeeds*.

SPEC. CHAR. Leaves on ſootſtalks, palmate. Stem bearing bulbs. Germen ſuperior. Petals blunt.

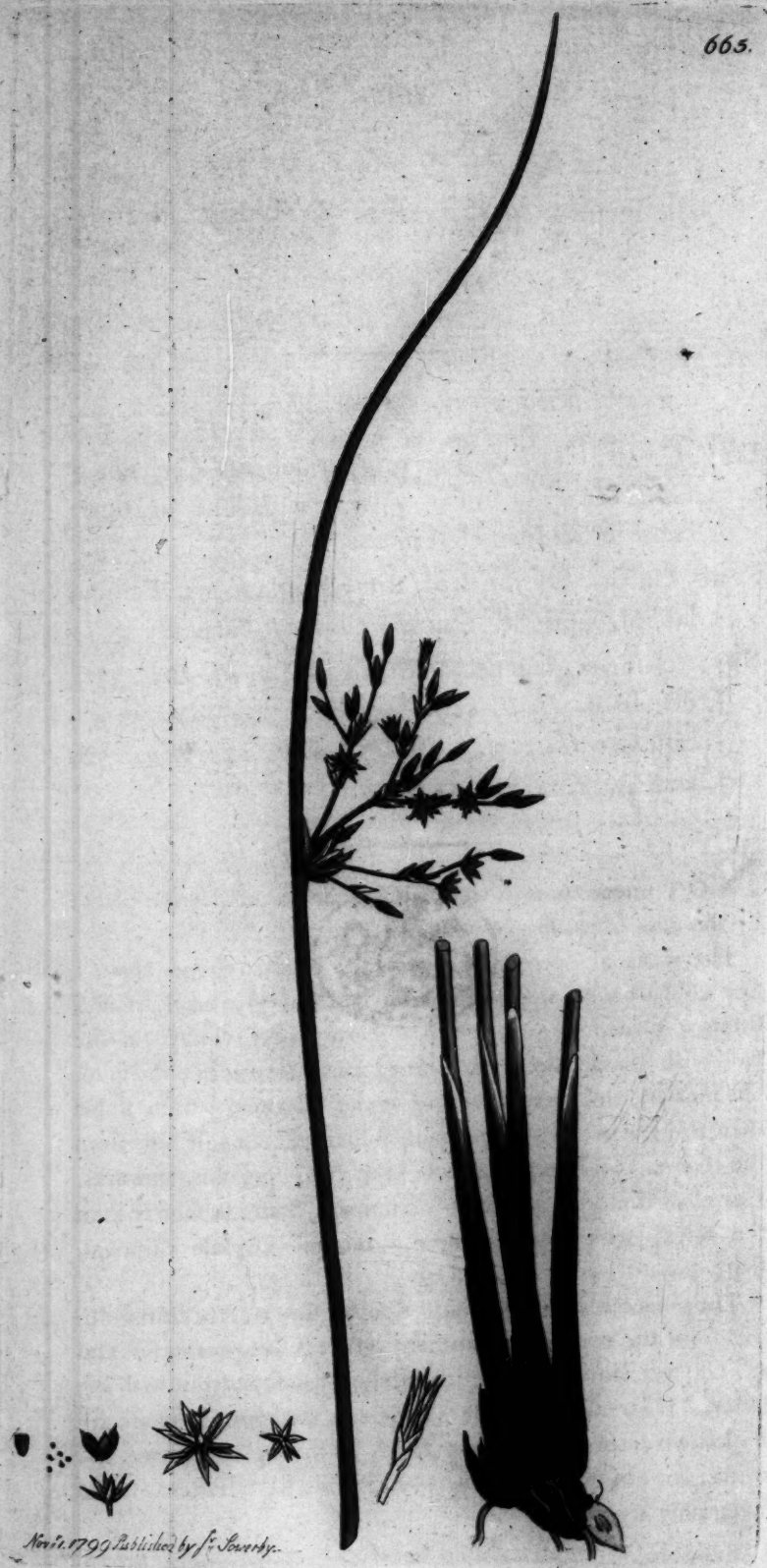
SYN. Saxifraga cernua. *Linn. Sp. Pl.* 577. *Fl. Lapp. t.* 2. *f.* 4. *Sm. Fl. Brit.* 453. *Dickſ. Tr. of Linn. Soc. v.* 2. 290. *With.* 405. *Hull.* 93.

MR. DICKSON firſt detected this rare alpine plant on the ſummit of Ben Lawers. The impoſſibility of procuring freſh ſpecimens from thence, has made us thankfully accept this from the garden of the Rev. Mr. Bale, F. L. S. at Withyam, Suſſex. Though a cultivated one, it exhibits the true wild appearance, and agrees preciſely with thoſe from Scotland and Lapland. It is perennial, and flowers in July or Auguſt.

Root a ſmall ſcaly bulb, throwing out branched black fibres. Stem four or five inches high, erect, round, leafy, moſtly ſmooth, generally ſimple and ſingle-flowered, ſometimes branched. Leaves alternate, on footſtalks, kidney-ſhaped, lobed in a palmate manner, a little ſucculent, ſmoothiſh; the upper ones bearing in their boſoms little purple ſcaly bulbs, which falling to the ground become new plants. Flower terminal, ſolitary, white, more or leſs drooping. Segments of the calyx elliptical, erect, clothed with glandular hairs. Petals obovate, blunt, often almoſt notched at the end, three-nerved, the nerves united above the baſe, obliterated before they reach the top. Germen entirely ſuperior, green.

The figure in *Fl. Dan. t.* 390, ſeems rather to belong to our plant than *t.* 22, which laſt has acute petals, and always a ſimple ſtem. Linnæus did not diſtinguiſh them.





Novr. 1799 Published by J.s Sowerby.

# JUNCUS glaucus.

## *Hard Ruſh.*

*HEXANDRIA Monogynia.*

GEN. CHAR. *Cal.* of 6 leaves, permanent. *Cor.* none. *Capſ.* ſuperior, of 3 valves, with one or three cells. *Seeds* ſeveral. *Stigmas* 3.

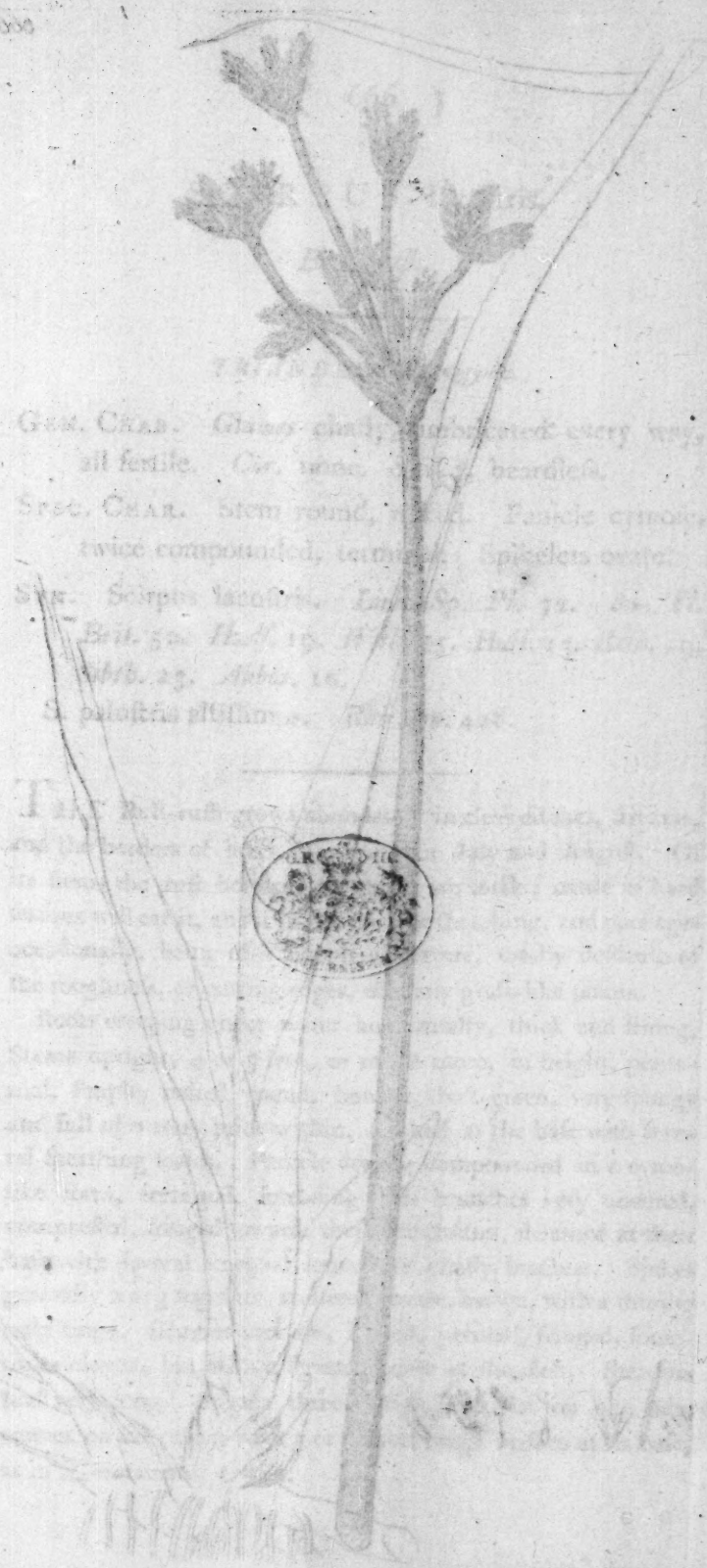
SPEC. CHAR. Stem naked, ſtraight, glaucous. Panicle lateral, upright. Capſule elliptical, acute.

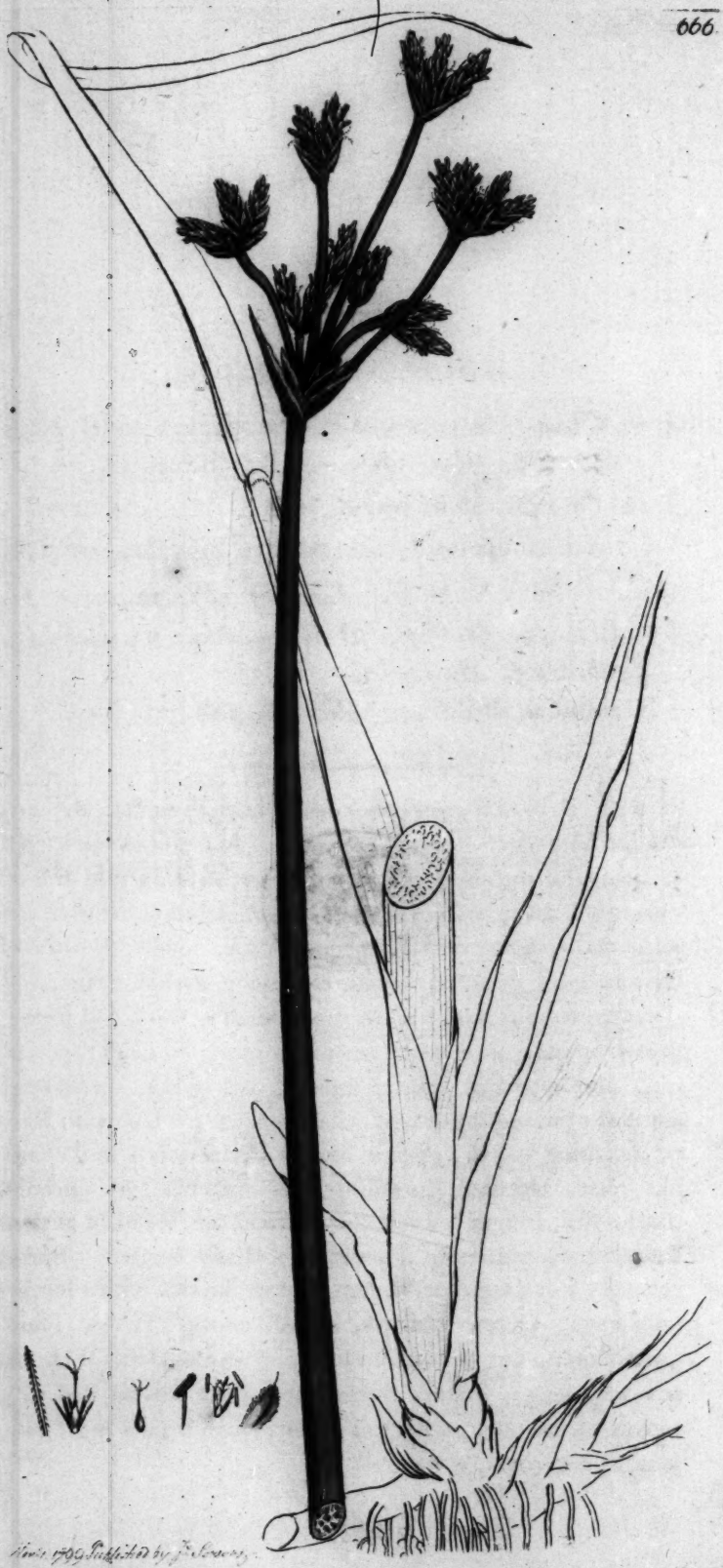
SYN. Juncus glaucus. *Sibth.* 113. *Sm. Fl. Brit.* 375.
J. effuſus β. *Hudſ.* 149.
J. inflexus. *With.* 345. *Hull.* 75. *Relh.* 141. *Abbot.* 78.
J. acutus. *Raii Syn.* 432.

NOT uncommon in wet paſtures, or on moiſt waſte places by the ſides of roads, flowering in July.

The roots are perennial, creeping, black. Stems about a foot and half high, upright, naked, rigid and very tough, round, ſtriated, glaucous; tapering to a ſharp point; clothed at the baſe with brown ſhining ſheathing ſcales. Leaves like the ſtem, but ſhorter, and perhaps rather to be eſteemed barren ſtems than real leaves. Panicle lateral, ſolitary, about half way from the root to the ſummit, much branched, ſpreading upwards. Leaves of the calyx awlſhaped, ſtriated. Stamina ſhorter than the calyx, with bright yellow antheræ. Capſule elliptical, ſharp-pointed, brown, poliſhed.

The glaucous colour and hard rigid texture readily diſtinguiſh this from the two more common ruſhes J. *conglomeratus* and *effuſus*; yet Linnæus, as well as Hudſon, confounded it with the latter. If no other mark were ſufficient, the *effuſus* may always be known from all our other *Junci*, by having only three ſtamina; an obſervation of Leers, which we have hitherto found invariably true.





June 1799 Published by J. Sowerby

# SCIRPUS lacuſtris.

## *Bull-ruſh.*

*TRIANDRIA Monogynia.*

GEN. CHAR. *Glumes* chaffy, imbricated every way, all fertile. *Cor.* none. *Seed* 1, beardleſs.

SPEC. CHAR. Stem round, naked. Panicle cymoſe, twice compounded, terminal. Spikelets ovate.

SYN. Scirpus lacuſtris. *Linn. Sp. Pl.* 72. *Sm. Fl. Brit.* 52. *Hudſ.* 19. *With.* 75. *Hull.* 13. *Relh.* 19. *Sibth.* 23. *Abbot.* 10.

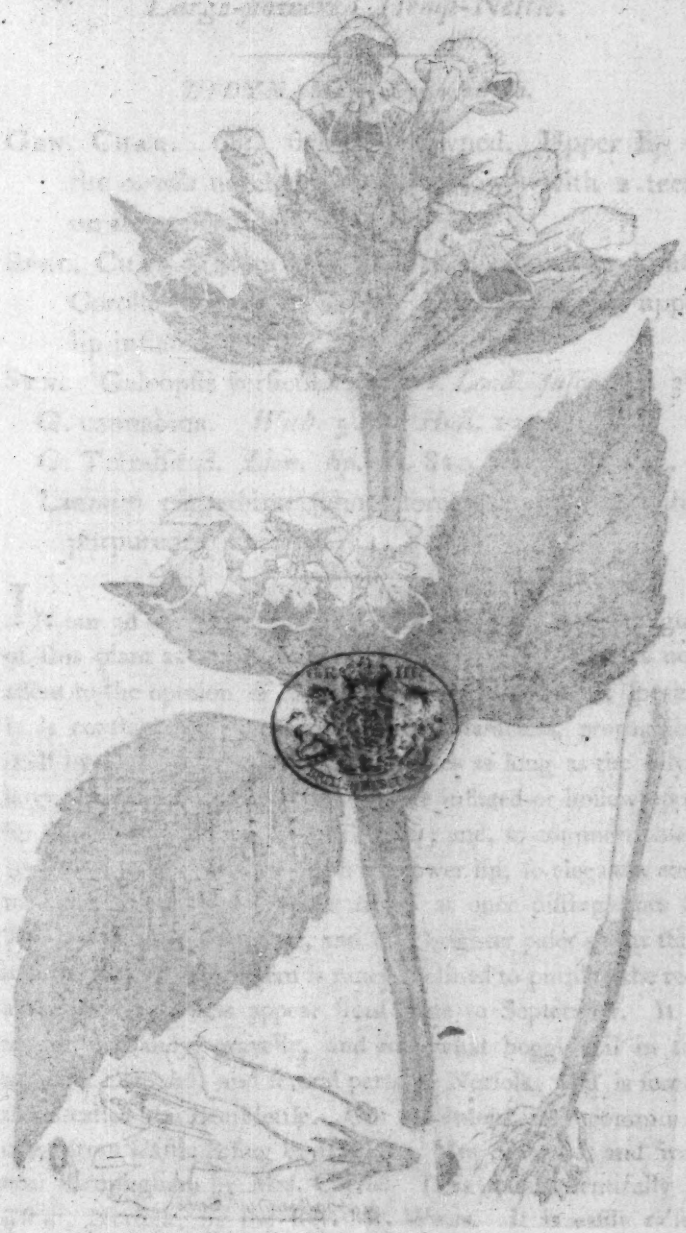
S. paluſtris altiſſimus. *Raii Syn.* 428.

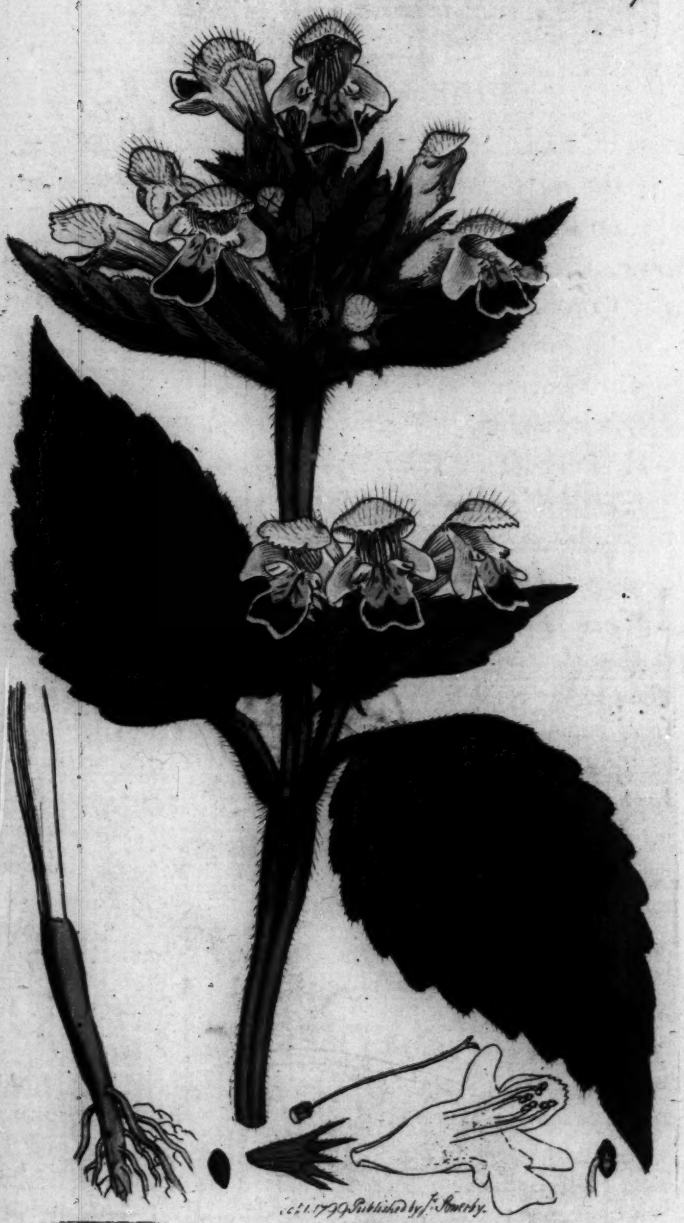
THE Bull-ruſh grows abundantly in clear ditches, ſtreams, and the borders of lakes, flowering in July and Auguſt. Of its ſtems the ruſh bottoms of chairs are made; cattle in hard ſeaſons will eat it, and it is alſo uſed for thatching, and packages occaſionally, being of a ſoft pliant texture, totally deſtitute of the roughneſs, or cutting edges, of many graſs-like plants.

Roots creeping under water horizontally, thick and ſtrong. Stems upright, 4 or 5 feet, or much more, in height, perennial, ſimple, naked, round, ſmooth, dark-green, very ſpongy and full of watery juice within, clothed at the baſe with ſeveral ſheathing ſcales. Panicle doubly compounded in a cyme-like form, terminal, ſpreading; its branches very unequal, compreſſed, fringed towards their extremities, ſheathed at their baſe with ſeveral unequal lanceolate chaffy bracteæ. Spikes generally 2 or 3 together, cluſtered, ovate, brown, with a ſhining ruſty tinge. Glumes concave, keeled, pointed, fringed, ſometimes cloven, but with a ſerrated point in the cleft. Stamina not very long. Stigma three-cleft. Seed flat on one ſide, convex on the other, with 5 or 6 ſhort rough briſtles at its baſe, as in S. *maritimus*, *t.* 542.

GALEOPSIS verticolor.

*Large-flowered Hemp-Nettle.*





# GALEOPSIS verſicolor.

## *Large-flowered Hemp-Nettle.*

*DIDYNAMIA Gymnoſpermia.*

GEN. CHAR. *Cal.* five-cleft, awned. Upper lip of the *corolla* notched, vaulted; lower with 2 teeth on its upper ſide.

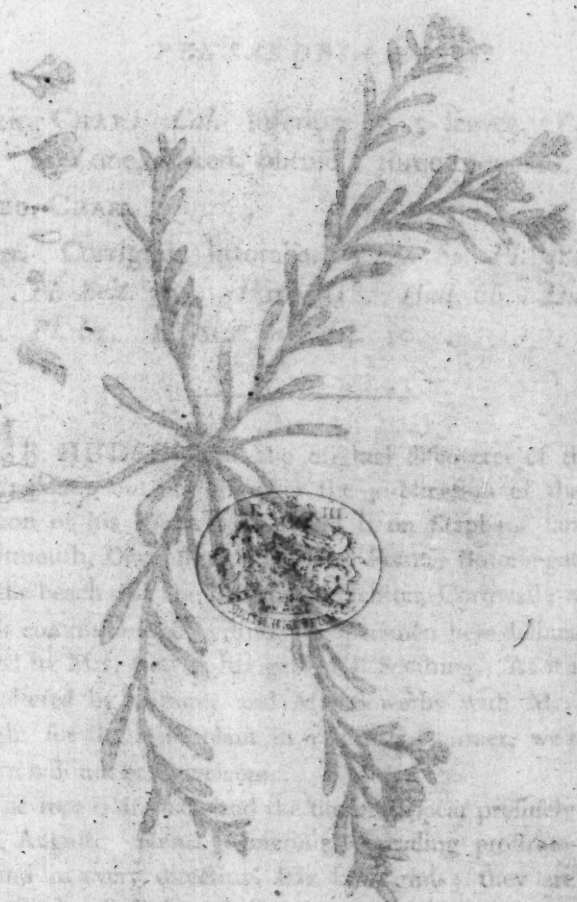
SPEC. CHAR. Stem briſtly, ſwelled below the joints. Corolla three times as long as the calyx; its upper lip inflated.

SYN. Galeopſis verſicolor. *Curt. Lond. faſc.* 6. *t.* 38.
G. cannabina. *With.* 529. *Hull.* 132.
G. Tetrahit β. *Linn. Sp. Pl.* 810. δ *Hudſ.* 257.
Lamium cannabino folio, flore amplo luteo, labio purpureo. *Raii Syn.* 241.

IN our 3d volume, *p.* 207, we have already promiſed a figure of this plant as a variety of *Galeopſis Tetrahit*, but we now aſſent to the opinion of thoſe who judge it a diſtinct ſpecies. It is conſtant in its appearance and characters, propagating itſelf by ſeed: the corolla is 3 or 4 times as long as the calyx, large and ſwelling, with a much more inflated or hollow upper lip than in any variety of the *Tetrahit*; and, to common obſervers, the ſtriking purple ſpot on the lower lip, ſo elegantly contraſted with the other yellow hues, at once diſtinguiſhes it. The leaves are alſo broader, and of a brighter paler green than in that ſpecies. The ſtem is much inclined to purple; the root annual; the flowers appear from June to September. It is found on a ſandy, gravelly, and ſomewhat boggy ſoil in the north of England, and ſeveral parts of Norfolk, and is ſometimes called the Bee Nettle. Our ſpecimens were communicated from Caſtle Riſing by the Hon. Mrs. Howard, and from near Birmingham by Mrs. Corrie. It is found plentifully at Aſhill, Norfolk, by the Rev. Mr. Watts. It is eaſily raiſed from ſeed, and is by no means unworthy of a place in the flower-garden.

## GALEOPSIS verticillata.

Large-flowered Hemp-Nettle.



Pl. 899. Pedicularis flammea. Published by Longman & Co. 1 Nov. 1799.

# CORRIGIOLA littoralis.

## *Sand Strapwort.*

*PENTANDRIA Trigynia.*

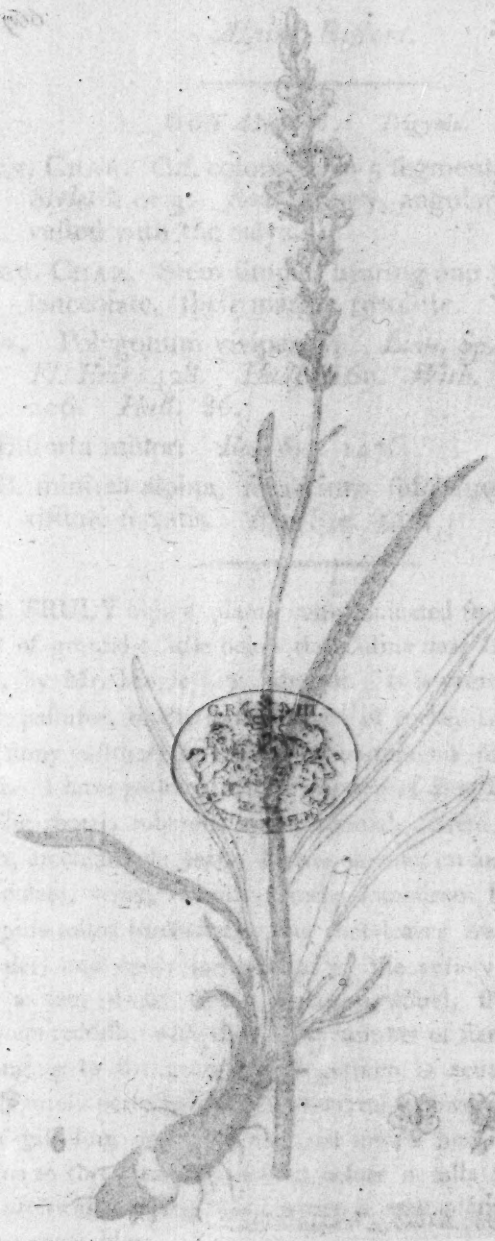
GEN. CHAR. *Cal.* inferior, of 5 leaves. *Petals* 5. *Seed* one, naked, obtuſely three-cornered.

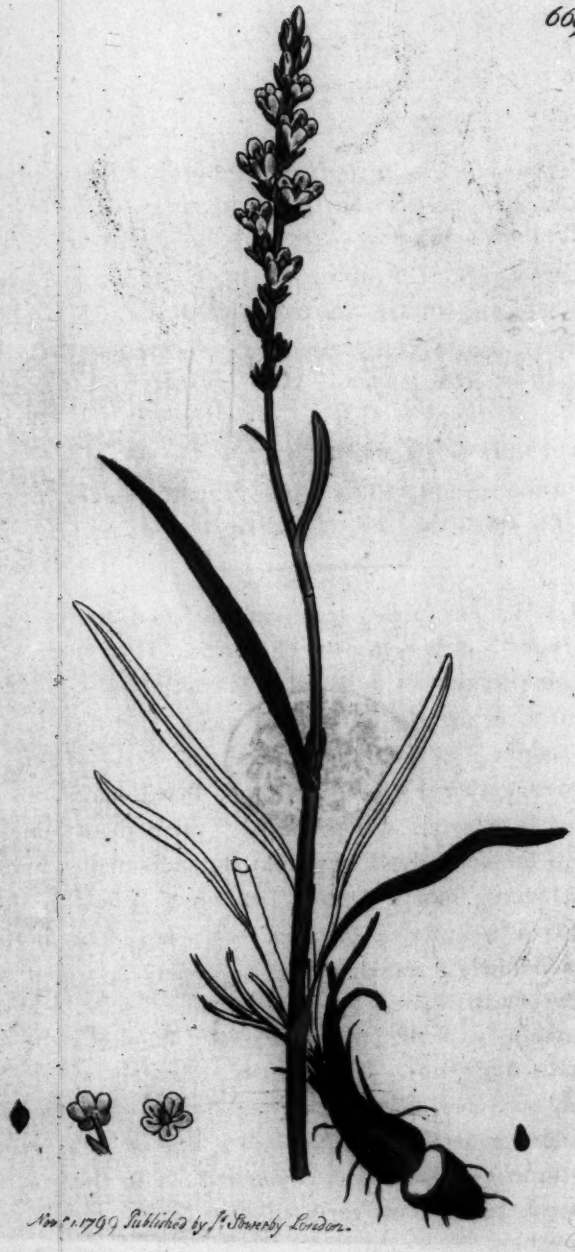
SPEC. CHAR. . . . . .

SYN. Corrigiola littoralis. *Linn. Sp. Pl.* 388. *Sm. Fl. Brit.* 339. *With.* 318. *Hull.* 66. *Dickſ. Dr. Pl.* 61. *H. Sicc. faſc.* 14. 10.

MR. HUDSON was the original diſcoverer of this plant in England, but not till after the publication of the ſecond edition of his *Flora*. He found it on Slapham ſands near Dartmouth, Devonſhire. The late Francis Borone gathered it on the beach near the tin mine at Helſton, Cornwall; and from ſeeds communicated by him, the ſpecimen here delineated was raiſed by Mrs. Kett in her garden at Seething. As it is not at all altered by culture, and Mr. Sowerby with Mr. Turner ſought for the wild plant in vain this ſummer, we truſt our figure will not be unwelcome.

The root is annual, and the flowers appear profuſely in July and Auguſt. Stems numerous, ſpreading proſtrate on the ground in every direction, like knot-graſs; they are round, ſmooth, but little branched. Leaves alternate, linear-lanceolate, obtuſe, entire, tapering at the baſe, glaucous, ſmooth, a little fleſhy, with a pair of membranous ſtipulæ at their inſertion. Flowers in terminal and lateral cluſters, ſmall, of a pearly hue, the leaves of the calyx being bordered with white, and the petals white alſo. Germen and antheræ purpliſh. Styles 3, ſhort, ſpreading. Seed black and ſhining.


G.R.
III.



Nov.r 1.1799 Published by Js. Sowerby London.

# POLYGONUM viviparum.

## *Alpine Biſtort.*

*OCTANDRIA Trigynia.*

GEN. CHAR. *Cal.* coloured, in 5 ſegments, permanent. *Styles* 2 or 3. *Seed* ſolitary, angular, ſuperior, inveſted with the calyx.

SPEC. CHAR. Stem ſimple, bearing one ſpike. Leaves lanceolate, their margin revolute.

SYN. Polygonum viviparum. *Linn. Sp. Pl.* 516. *Sm. Fl. Brit.* 428. *Hudſ.* 169. *With.* 383. *Lightf.* 206. *Hull.* 86.

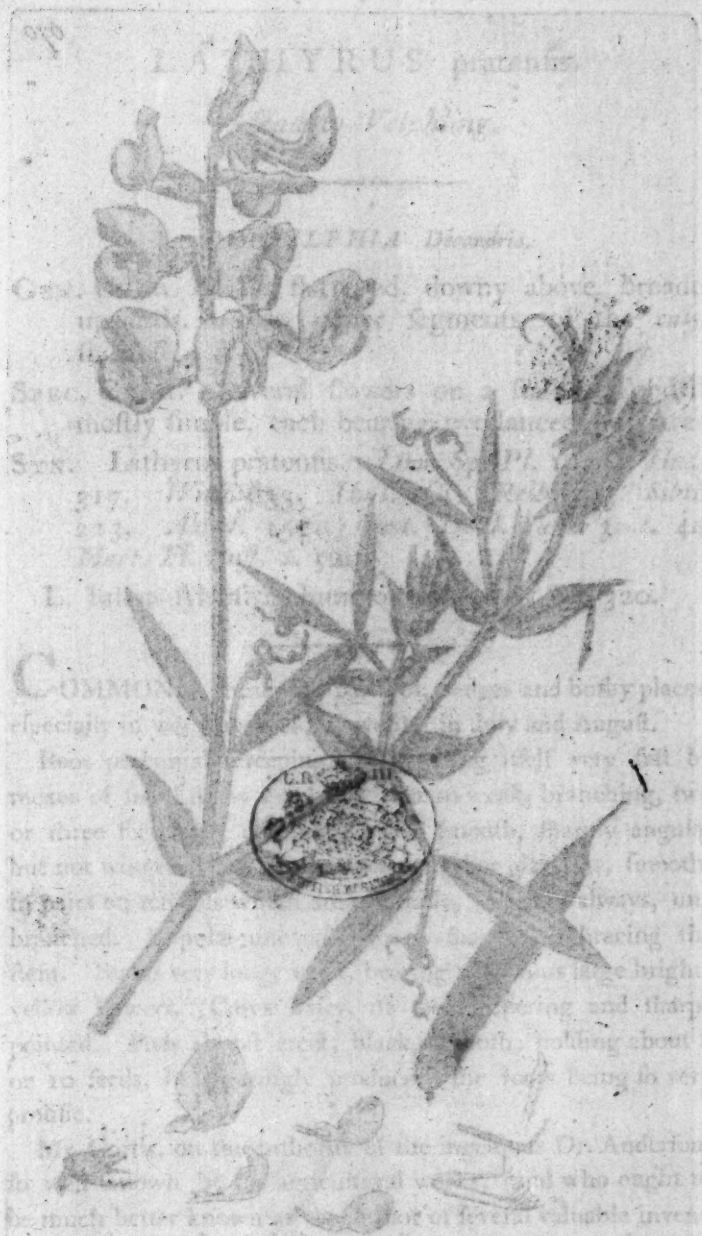
Biſtorta minor. *Raii Syn.* 147.

β B. minima alpina, foliis imis ſubrotundis et minutiſſimè ſerratis. *Raii Syn.* 147.

A TRULY alpine plant, communicated freſh from a moiſt ſpot of ground a little below the Culms near Horton in Craven, by Mr. Bingley in July laſt. It is principally found in high paſtures, or the moiſt fiſſures of rocks, Lightfoot ſays in dry ſtony paſtures, in the moſt mountainous parts of this iſland. I have gathered it near the top of Ben Lomond.

The root is tuberous and perennial. Stem about 6 inches high, erect, ſimple, leafy. Leaves narrow, on footſtalks, linear-lanceolate, veiny, ſmooth (except ſometimes beneath), their margins rolled backwards; the root-leaves are often ſhorter, broader, and finely ſerrated, as in the variety β, which has alſo a very dwarf ſtem. Spike terminal, ſlender, obtuſe. Flowers reddiſh, with the proper number of ſtamina and ſtyles belonging to the genus. The germen is acutely triangular. Seeds rarely perfected, for the lowermoſt flowers eſpecially have their piſtillum generally changed into a bud or bulb, which begins to throw out leaves even before it falls to the ground, and afterwards taking root, forms a new plant, as in many alpine vegetables.

In ſenſible qualities this ſpecies altogether agrees with the more common Biſtort *t.* 509.





Nov.1799 Published by J.Sowerby London.

# LATHYRUS pratenſis.

## *Meadow Vetchling.*

*DIADELPHIA Decandria.*

GEN. CHAR. *Style* flattened, downy above, broader upwards. Two upper ſegments of the *calyx* ſhorteſt.

SPEC. CHAR. Several flowers on a ſtalk. Tendrils moſtly ſimple, each bearing two lanceolate leaves.

SYN. Lathyrus pratenſis. *Linn. Sp. Pl.* 1033. *Hudſ.* 317. *With.* 633. *Hull.* 161. *Relh.* 273. *Sibth.* 223. *Abbot.* 157. *Curt. Lond. faſc.* 3. *t.* 44. *Mart. Fl. Ruſt. t.* 52.

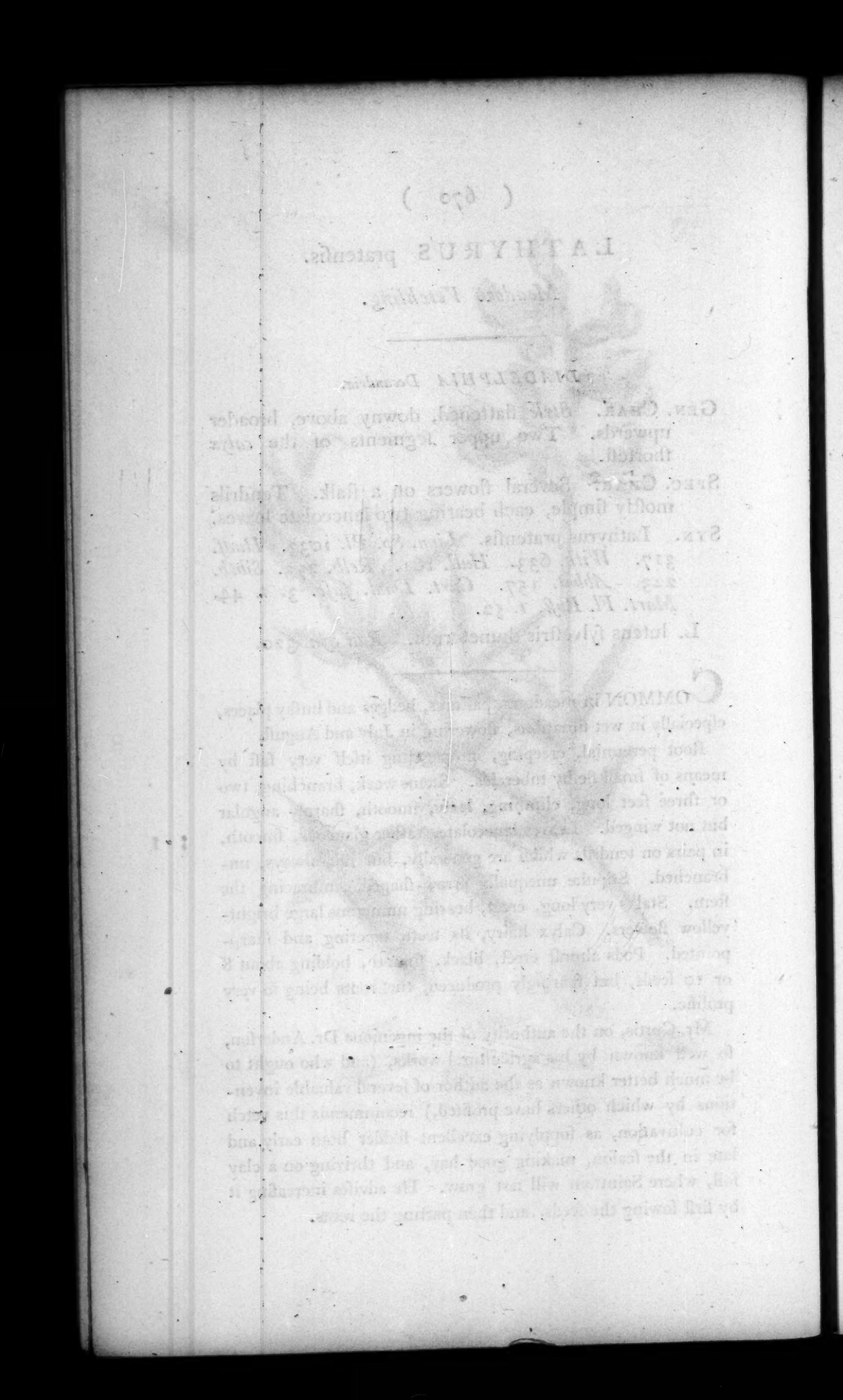
L. luteus ſylveſtris dumetorum. *Raii Syn.* 320.

COMMON in meadows, paſtures, hedges and buſhy places, eſpecially in wet ſituations, flowering in July and Auguſt.

Root perennial, creeping, propagating itſelf very faſt by means of ſmall fleſhy tubercles. Stems weak, branching, two or three feet long, climbing, leafy, ſmooth, ſharply angular but not winged. Leaves lanceolate, rather glaucous, ſmooth, in pairs on tendrils which are generally, but not always, unbranched. Stipulæ unequally arrow-ſhaped, embracing the ſtem. Stalks very long, erect, bearing numerous large bright-yellow flowers. Calyx hairy, its teeth tapering and ſharp-pointed. Pods almoſt erect, black, ſmooth, holding about 8 or 10 ſeeds, but ſparingly produced, the roots being ſo very prolific.

Mr. Curtis, on the authority of the ingenious Dr. Anderſon, ſo well known by his agricultural works, (and who ought to be much better known as the author of ſeveral valuable inventions by which others have profited,) recommends this vetch for cultivation, as ſupplying excellent fodder both early and late in the ſeaſon, making good hay, and thriving on a clay ſoil, where Saintfoin will not grow. He adviſes increaſing it by firſt ſowing the ſeeds, and then parting the roots.

# LATHYRUS pratensis.







Dec.r 1.1796. Published as the Act directs by Sr Thomas Frederick Goodere.

# MALVA ſylveſtris.

## *Common Mallow.*

*MONADELPHIA Polyandria.*

GEN. CHAR. *Cal.* double; the outermoſt of three leaves. *Seed-caſes* numerous, circularly arranged. *Seeds* ſolitary.

SPEC. CHAR. Stem upright, herbaceous. Leaves with ſeven ſharpiſh lobes. Leaf-ſtalks and flower-ſtalks hairy.

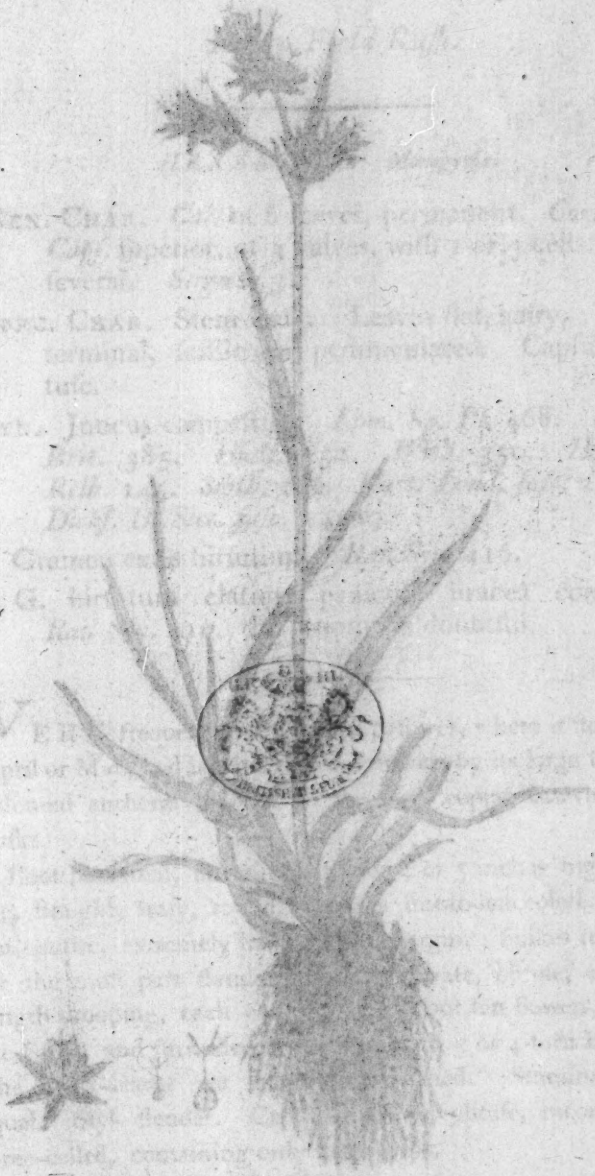
SYN. Malva ſylveſtris. *Linn. Sp. Pl.* 969. *Hudſ.* 307. *With.* 613. *Hull.* 155. *Relh.* 265. *Sibth.* 215. *Abbot.* 151. *Curt. Lond. faſc.* 2. *t.* 51. *Woodv. Med. Bot. t.* 54.

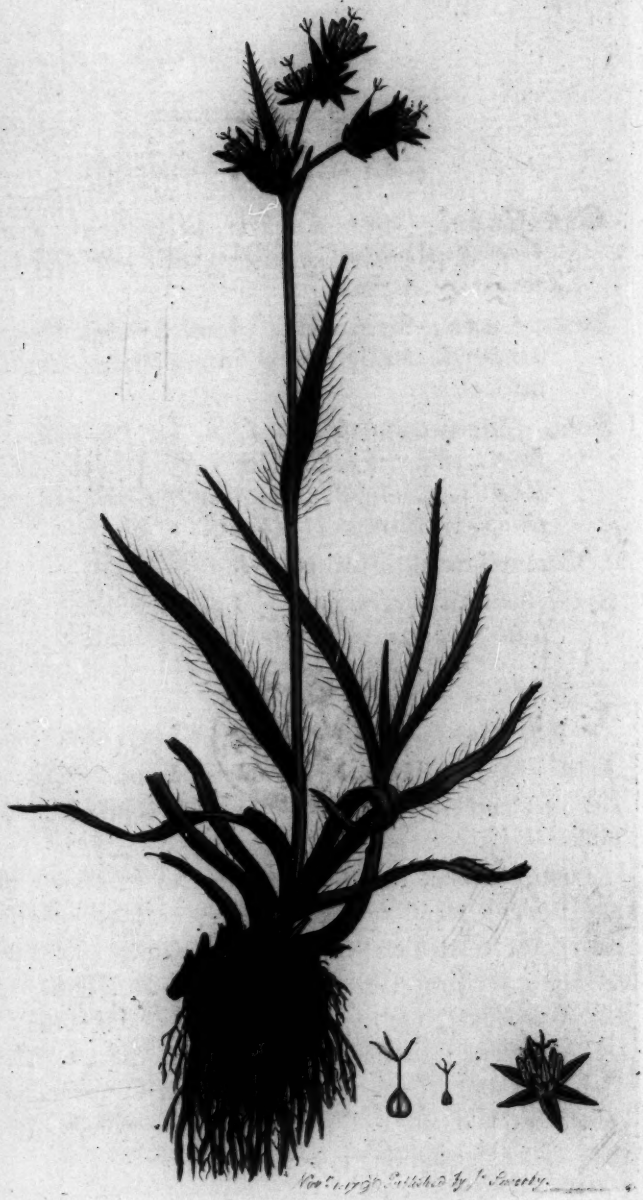
M. vulgaris. *Raii Syn.* 251.

THE common Mallow, ſo plentiful by road ſides and in all waſte places, needs little botanical illuſtration. Its upright buſhy ſtem, and large purple flowers, which are produced in the greateſt profuſion, ſufficiently diſtinguiſh it from the almoſt equally common *M. rotundifolia*. It is perennial, and may be found in bloſſom from May to September.

The root is ſpindle-ſhaped, branched, whitiſh. Stem very much branched and ſpreading, round, hairy. Leaves alternate, on foot-ſtalks, heart-ſhaped, plaited, roughiſh, divided into 7 crenate lobes; the upper ones are moſt deeply and ſharply lobed. Flower-ſtalks cluſtered, hairy, ſingle-flowered. Calyx hairy. Petals inverſely heart-ſhaped, three or four times as long as the calyx, of a full roſe-colour veined with deeper purple, ſmooth and ſhining, as is alſo the column of the ſtamina. Pollen whitiſh, large, as in all this tribe.

The whole herb, eſpecially the root, abounds with a pure mucilage, and poſſeſſes the emollient qualities of the Marſh Mallow, *Althæa*, though perhaps in an inferior degree. It has however the advantage of being much more common, and within every-body's reach.





New Edit.d Published by J. Sowerby.

# JUNCUS campeſtris.

## *Hairy Field Ruſh.*

*HEXANDRIA Monogynia.*

GEN. CHAR. *Cal.* of 6 leaves, permanent. *Cor.* none. *Capſ.* ſuperior, of 3 valves, with 1 or 3 cells. *Seeds* ſeveral. *Stigmas* 3.

SPEC. CHAR. Stem leafy. Leaves flat, hairy. Spikes terminal, ſeſſile and pedunculated. Capſules obtuſe.

SYN. Juncus campeſtris. *Linn. Sp. Pl.* 468. *Sm. Fl. Brit.* 385. *Hudſ.* 152. *With.* 350. *Hull.* 76. *Relh.* 145. *Sibth.* 116. *Curt. Lond. faſc.* 2. *t.* 19. *Dickſ. H. Sicc. faſc.* 14. 17.

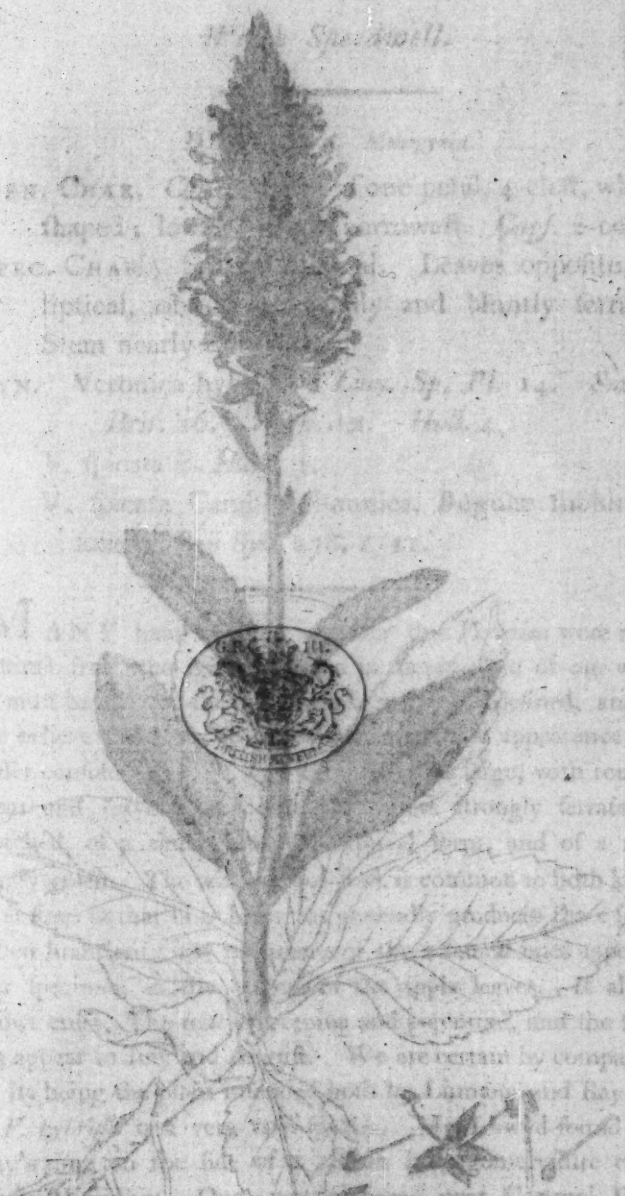
Gramen exile hirſutum. *Raii Syn.* 416.

β G. hirſutum elatius, paniculâ junceâ compactâ. *Raii Syn.* 416, the ſynonyms doubtful.

VERY frequent in dry barren paſtures, where it flowers in April or May, and is rendered conſpicuous by its large ſulphur-coloured antheræ oppoſed to the dark copper-brown of the huſks.

Root perennial, creeping. Stems 4 or 5 inches high, ſimple, ſtraight, leafy, round. Leaves linear-lanceolate, acute, flat, entire, extremely hairy in the margin. Spikes terminal, for the moſt part ſtanding on ſtalks, ovate, obtuſe, erect, at length drooping, each conſiſting of about ten flowers, which are ſeſſile, and furniſhed at the baſe with 3 or 4 torn bracteæ. The calyx-leaves are lanceolate, pointed. Stamina ſhort, equal. Style ſlender. Capſule obovate, obtuſe, incompletely three-celled, containing only three ſeeds.

The variety β grows in turfy bogs, and is 12 or 15 inches high, more naked, with more thickly cluſtered ſpikes; but I have in vain ſought, though with ſcrupulous exactneſs, for any ſpecific difference in the ſtructure of the fructification.





Dec.1.1795. Published by J.s Sowerby Londres.

# VERONICA hybrida.

## *Welch Speedwell.*

*DIANDRIA Monogynia.*

GEN. CHAR. *Cor.* inferior, of one petal, 4-cleft, wheel-ſhaped; lower diviſion narroweſt. *Capſ.* 2-celled.

SPEC. CHAR. Spikes terminal. Leaves oppoſite, elliptical, obtuſe, unequally and bluntly ſerrated. Stem nearly upright.

SYN. Veronica hybrida. *Linn. Sp. Pl.* 14. *Sm. Fl. Brit.* 16. *With.* 12. *Hull.* 4.

V. ſpicata β. *Hudſ.* 3.

V. ſpicata Cambrobritannica, Bugulæ ſubhirſuto folio. *Raii Syn.* 278. *t.* 11.

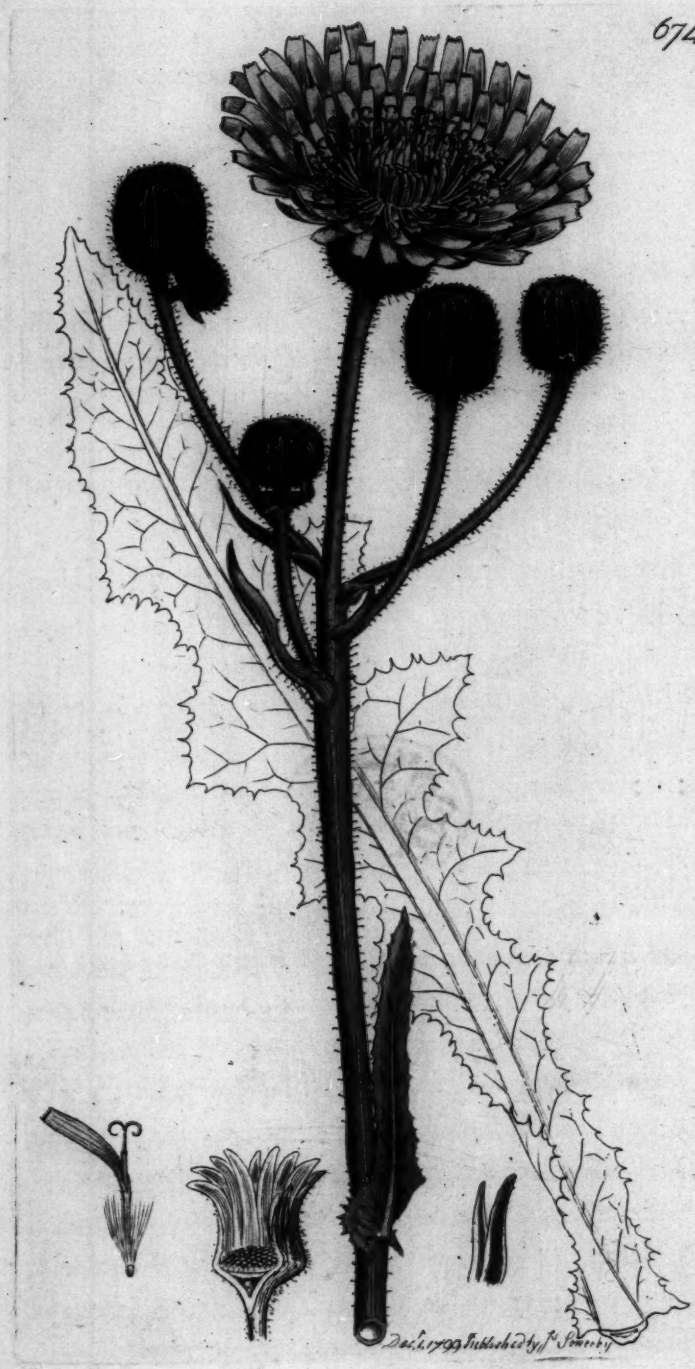
MANY have doubted whether this *Veronica* were really diſtinct from the *ſpicata* figured in the 2d plate of our work. It muſt be allowed the difference is not eaſily defined, and yet we believe them to be diſtinct. In ſize and appearance they differ conſiderably. *V. hybrida* is twice as large, with rougher ſtem and leaves; the latter are more ſtrongly ſerrated or notched, of a much broader elliptical form, and of a more graſſy green. The winged foot-ſtalk is common to both kinds. The ſtem in that now before us generally produces three ſpikes when luxuriant; the rudiments of the 2 lateral ones appear in our ſpecimen in the boſoms of the upper leaves. It always grows erect. The root is creeping and perennial, and the flowers appear in July and Auguſt. We are certain by compariſon of its being the plant intended both by Linnæus and Ray.

*V. hybrida* is a very rare ſpecies. Mr. Lhwyd found it in Ray's time on the ſide of a hill in Montgomeryſhire called Craig Wreidhin.—Ours was gathered near Cartmel Wells Lancaſhire, on Humphrey head, a ſteep rock jutting into the ſea, by Mr. Bingley. Mr. Crowe and Mr. Woodward obſerved this plant in the ſame place about 18 years ago.

# VERONICA hybrida.

## Hybrid Speedwell.





# SONCHUS arvenſis.

## *Corn Sow-thiſtle.*

*SYNGENESIA Polygamia-æqualis.*

GEN. CHAR. *Receptacle* naked. *Cal.* imbricated, ſwelling at the baſe. *Down* ſimple, ſeſſile.

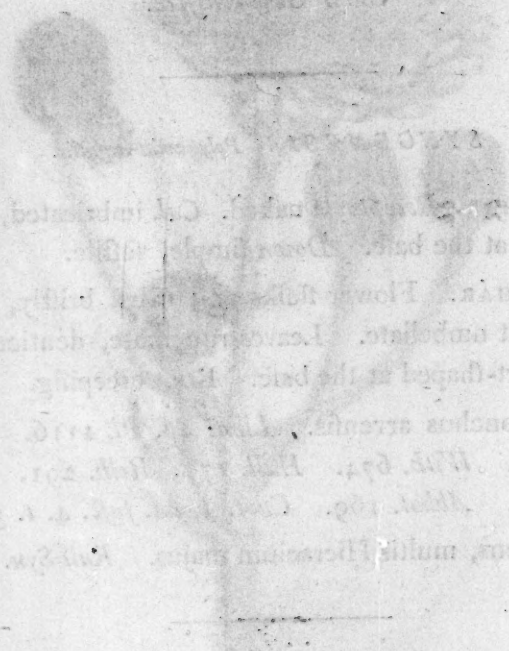
SPEC. CHAR. Flower-ſtalks and calyx briſtly, ſomewhat umbellate. Leaves runcinate, denticulated, heart-ſhaped at the baſe. Root creeping.

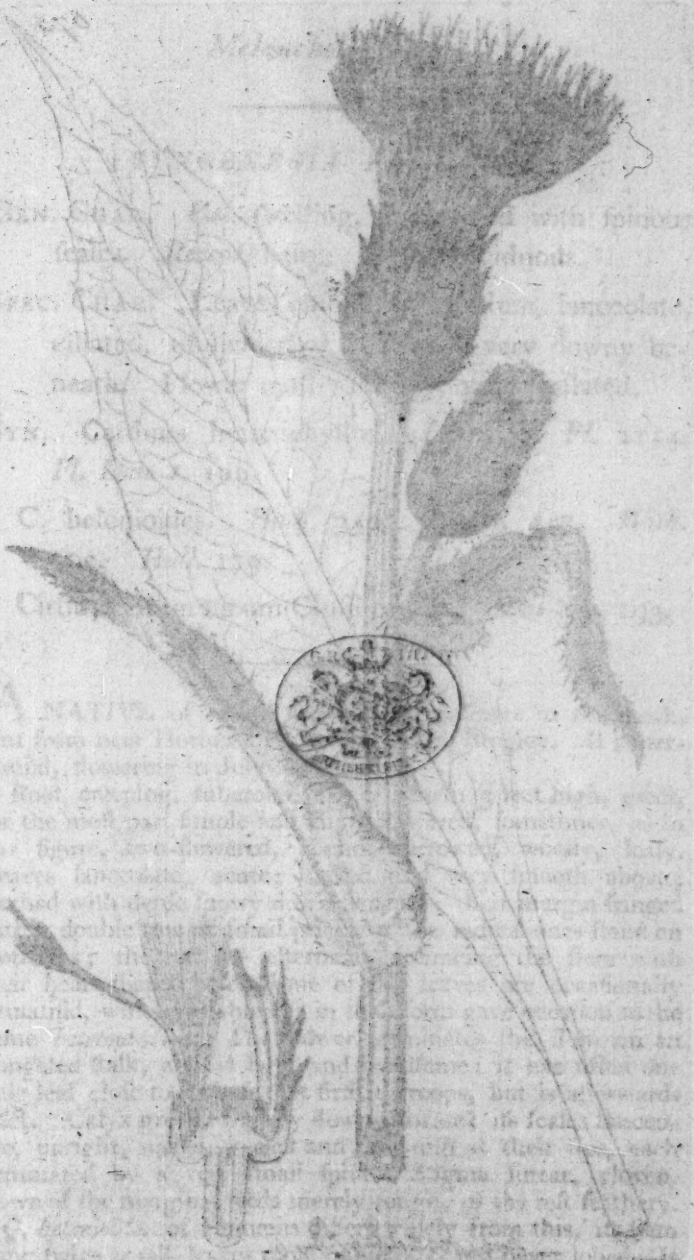
SYN. Sonchus arvenſis. *Linn. Sp. Pl.* 1116. *Hudſ.* 337. *With.* 674. *Hull.* 177. *Relh.* 291. *Sibth.* 237. *Abbot.* 169. *Curt. Lond. faſc.* 4. *t.* 53.

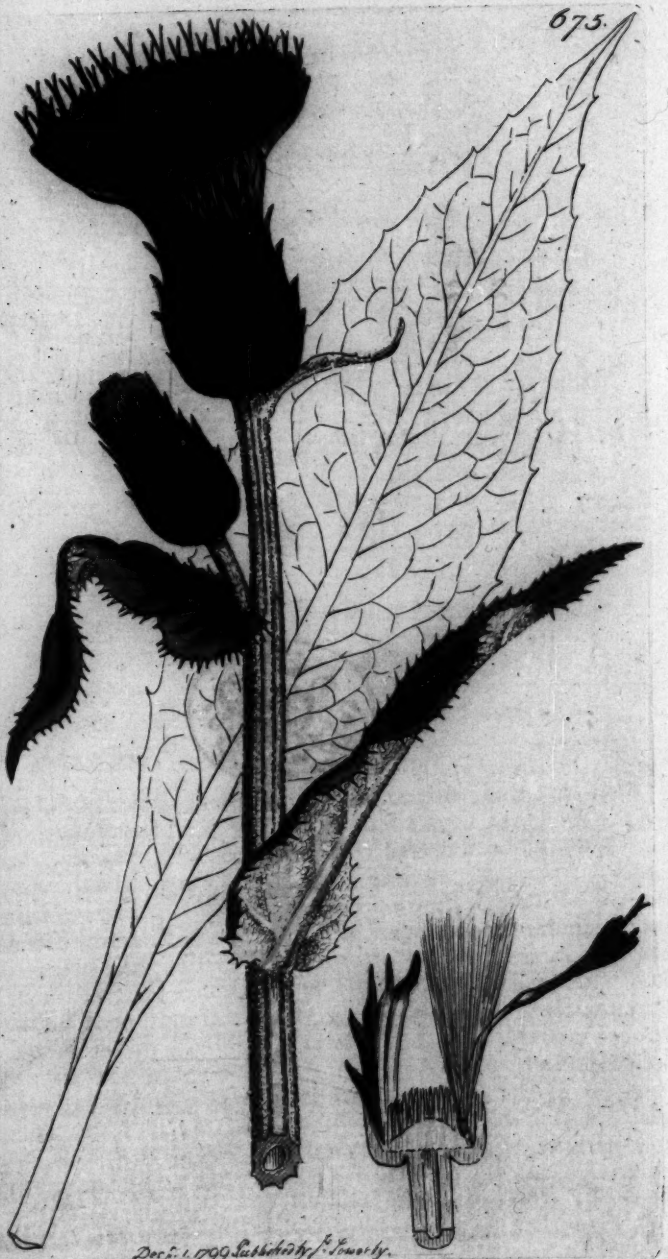
S. repens, multis Hieracium majus. *Raii Syn.* 163.

THIS is a common and pernicious weed in corn-fields, though not of ſo general occurrence as the *S. oleraceus*. It is perennial, flowering in July and Auguſt.

Root creeping, milky, compoſed of oblong fleſhy branches, which render it very difficult to be extirpated. Stem 3 or 4 feet high, erect, but little branched, roundiſh, hollow, leafy. Leaves runcinate, ſharpiſh, ſmooth, fringed with little ſpinous teeth; the upper ones heart-ſhaped at the baſe, and embracing the ſtem; the uppermoſt of all entire. Panicle ſomewhat cymoſe or umbellate, terminal, of few flowers. The calyx, flower-ſtalks, and upper part of the ſtem are all clothed with ſpreading brown glandular briſtles. Flowers very large and conſpicuous, of a bright gold-colour, externally reddiſh. Each floret has a hairy tube. Seeds furrowed. Down ſmooth.






673.
Dec.r 1. 1799 Published by J. Sowerby.

# CARDUUS heterophyllus.

## *Melancholy Thiſtle.*

*SYNGENESIA Polygamia-æqualis.*

GEN. CHAR. *Cal.* ſwelling, imbricated with ſpinous ſcales. *Recept.* hairy. *Down* deciduous.

SPEC. CHAR. Leaves embracing the ſtem, lanceolate, ciliated, undivided or laciniated, very downy beneath. Flower moſtly ſolitary, pedunculated.

SYN. Carduus heterophyllus. *Linn. Sp. Pl.* 1154. *Fl. Dan. t.* 109.

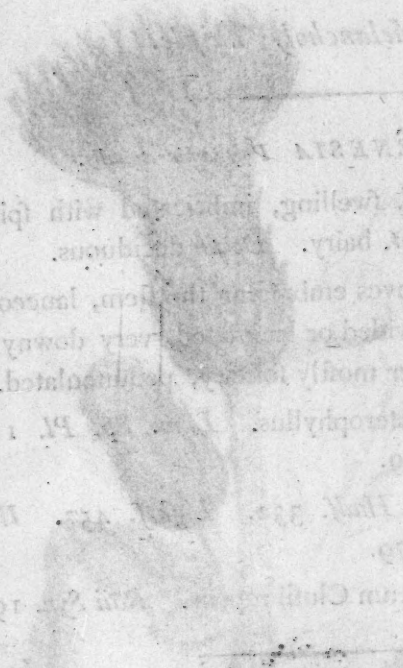
C. helenioides. *Hudſ.* 352. *Lightf.* 457. *With.* 702. *Hull.* 179.

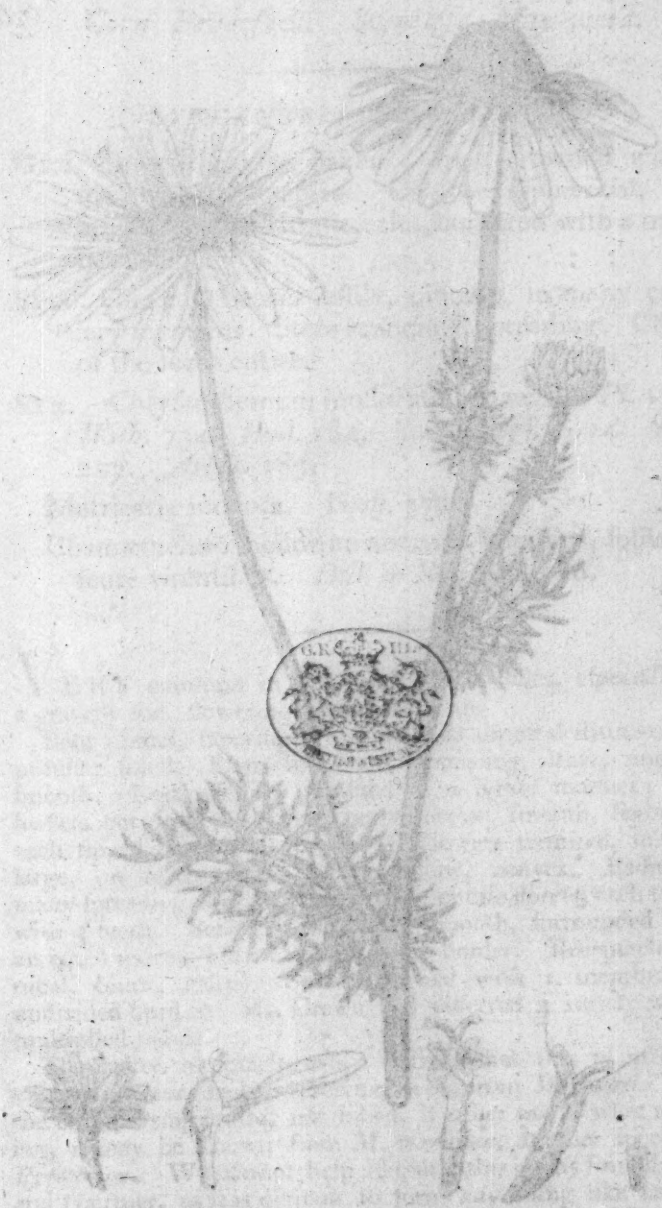
Cirſium Britannicum Cluſii repens. *Raii Syn.* 193.

A NATIVE of rather moiſt alpine paſtures in the north, ſent from near Horton in Craven by Mr. Bingley. It is perennial, flowering in July or Auguſt.

Root creeping, tuberous, black. Stem 3 feet high, erect, for the moſt part ſimple and ſingle-flowered, ſometimes, as in our figure, two-flowered, round, furrowed, woolly, leafy. Leaves lanceolate, acute; naked and very ſmooth above; clothed with denſe ſnowy down beneath; their margin fringed with a double row of ſmall prickles; the radical ones ſtand on footſtalks; the reſt are alternate, embracing the ſtem with their heart-ſhaped baſe; ſome of the leaves are occaſionally pinnatifid, which variableneſs in their form gave occaſion to the name *heterophyllus*. The flower terminates the ſtem on an elongated ſtalk, and is large and handſome; it has often one little leaf cloſe to its baſe; at firſt it droops, but is afterwards erect. Calyx green, ſlightly downy, ovate; its ſcales lanceolate, upright, naked, keeled and browniſh at their tips, each terminated by a very ſmall ſpine. Stigma linear, cloven. Down of the marginal ſeeds merely rough, of the reſt feathery.

*C. helenioides* of Linnæus differs widely from this, its ſtem being twice as tall, leaves more numerous, and never lobed. It bears four or more ſeſſile flowers cluſtered together at the top of the ſtem, but half the ſize of ours, and is a ſtranger to our iſland.







Dec.r 1. 1800. Published by J.s Sowerby London.

# PYRETHRUM inodorum.

*Corn Feverfew. Scentleſs May-weed.*

*SYNGENESIA Polygamia ſuperflua.*

GEN. CHAR. *Recept.* naked. *Seeds* crowned with a membranous margin. *Cal.* hemiſphærical, imbricated with ſharpiſh ſcales, bordered with a membrane.

SPEC. CHAR. Leaves ſeſſile, pinnate, in many capillary ſegments. Stem branched, ſpreading. Crown of the ſeeds entire.

SYN. Chryſanthemum inodorum. *Linn. Sp. Pl.* 1253. *With.* 734. *Hull.* 184. *Relh. Suppl.* 1. 14. *Sibth.* 257. *Abbot.* 185.

Matricaria inodora. *Hudſ.* 372.

Chamæmelum inodorum annuum humilius, foliis obſcurè virentibus. *Dill. in Raii Syn.* 186.

VERY common in fields and by way-ſides, eſpecially on a gravelly ſoil, flowering late in Autumn.

Root annual, tapering. Whole herb almoſt deſtitute of any peculiar ſmell. Stem branched, ſpreading, leafy, angular, ſmooth. Leaves ſeſſile, pinnated in a lyrate manner; their leaflets cut into numerous, very narrow, ſmooth, ſegments, each tipped with a little point. Flowers terminal, ſolitary, large, on naked ſtalks. Diſk yellow, convex. Radius of many ſpreading elliptic-oblong white obtuſe florets, each tipped with 3 teeth. Scales of the calyx ſmooth, ſurrounded with an equal narrow brown membranous border. Receptacle conical, blunt, naked. Seeds crowned with a membranous undivided border. Mr. Crowe has obſerved a variety with a multiplied radius.

The naked receptacle eaſily diſtinguiſhes this plant from every *Anthemis*, and the crowned ſeeds from *Matricaria*. By the crown being entire, not lobed, if other marks were wanting, it may be known from *M. maritima*, another ſpecies of *Pyrethrum*. We cannot help adopting this genus from Haller and Gærtner, as it is difficult to form any thing like natural genera in this order without adverting to the crown of the ſeed. The common Feverfew makes the third Britiſh ſpecies of *Pyrethrum*, having certainly the proper eſſential character, though Haller appears to have overlooked it.

## PYRETHRUM inodorum.

Corn Feverfew. Scentless May-weed.

---

SYNGENESIA Polygamia Superflua.

Gen. Char. Calyx imbricated. Seeds crowned with a membranous margin. Vid. Gen. plant. 734.

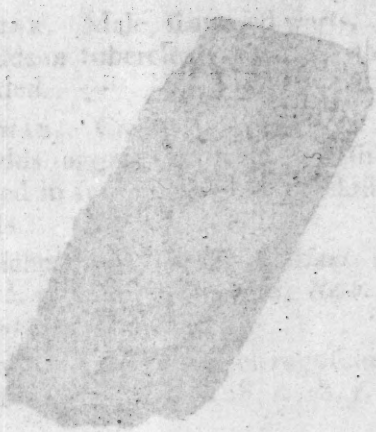
Spec. Char. & Leaves pinnatifid, pinnules, in many capillary segments. Stem branched, spreading. Crown of the seeds entire.

Syn. Chrysanthemum inodorum. Linn. Sp. Pl. 1253.
With. 734. Hull. 484. Fl. Dan. t. 74. Sibth. 352.
Eng. Bot. 185.
Matricaria inodora. Huds. 372.
Chamæmelum inodorum annuum fœtidum, foliis obtusis virentibus. Dill. in Raii Syn. 186.

---

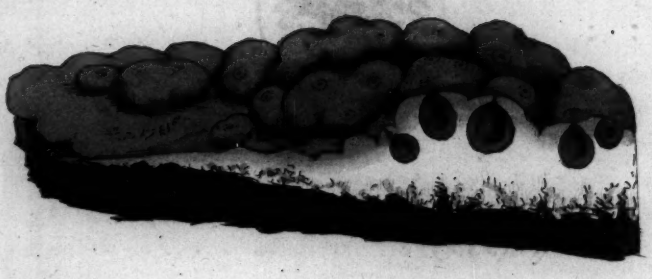
VERY common in fields and hedges, especially on a gravelly soil, flowering [illegible]. Annual, rising [illegible] with a single [illegible] stem. Seeds brownish, spreading, [illegible], angular, smooth. Leaves [illegible] pinnated to a [illegible] manner; their segments cut into many [illegible] narrow, smooth, [illegible], each ending [illegible] in a [illegible] point. [illegible] terminal, solitary, large, on naked [illegible]. Calyx [illegible] convex. Florets of many spreading [illegible] blue [illegible] each tipped with 5 teeth; [illegible] smooth, terminated with an equal narrow [illegible] border. Receptacle conical, blunt, naked. [illegible] with a membranous [illegible] border. Mr. Lindop has observed a variety with a [illegible] radius.

[illegible] the plant from [illegible] the [illegible] [illegible] [illegible]




G.R. III.





# LICHEN pertuſus.

## *Pierced Lichen.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. Male, ſcattered warts. Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Cruſtaceous, greyiſh white, poliſhed. Shields aggregate, waxy, fleſh-coloured, concealed in ſwelling, poliſhed, cluſtered, perforated warts.

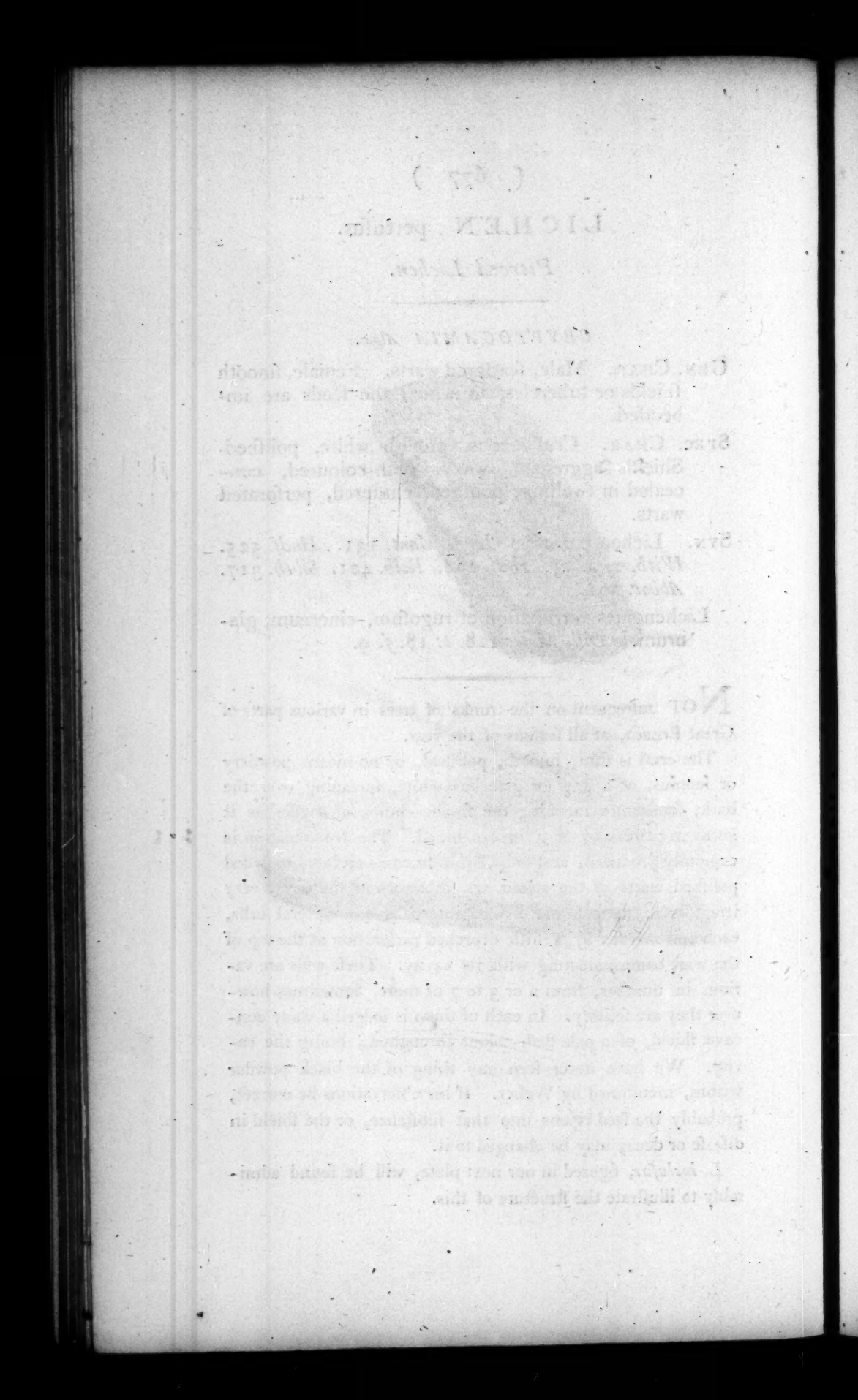
SYN. Lichen pertuſus. *Linn. Mant.* 131. *Hudſ.* 525. *With. v.* 4. 15. *Hull.* 288. *Relh.* 421. *Sibth.* 317. *Abbot.* 261.

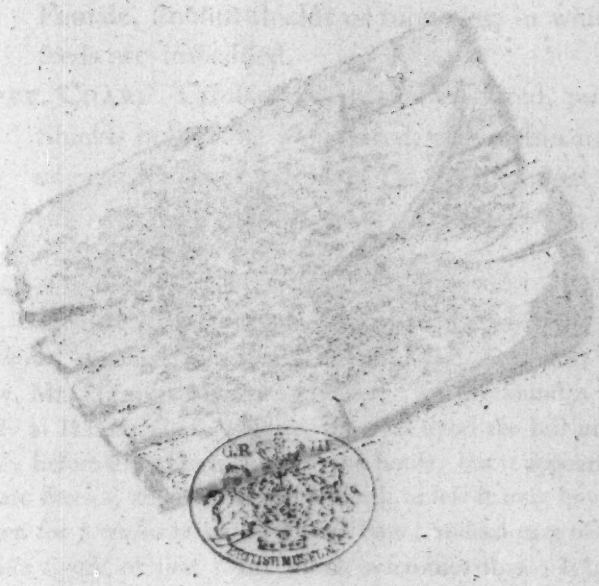
Lichenoides verrucoſum et rugoſum, cinereum, glabrum. *Dill. Muſc.* 128. *t.* 18. *f.* 9.

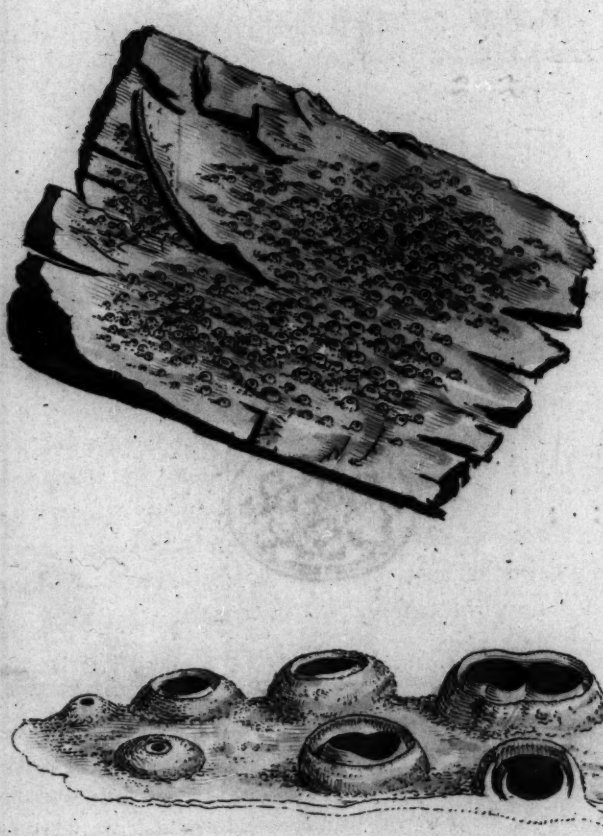
NOT unfrequent on the trunks of trees in various parts of Great Britain, at all ſeaſons of the year.

The cruſt is thin, ſmooth, poliſhed, by no means powdery or leprous, of a grey or glaucous white, ſpreading over the bark, ſometimes inveſting the ſmaller kinds of moſſes as it goes, in patches 2 or 3 inches broad. The fructification is copiouſly produced, and lodged in numerous elevated crowded poliſhed warts of the colour and ſubſtance of the cruſt, very irregular in their form, divided internally into ſeveral cells, each cell marked by a little depreſſed perforation at the top of the wart communicating with its cavity. Theſe cells are various in number, from 2 or 3 to 7 or more, ſometimes however they are ſolitary. In each of them is lodged a waxy concave ſhield, of a pale fleſh-colour throughout, lining the cavity. We have never ſeen any thing of the black powder within, mentioned by Weber. If his obſervations be correct, probably the ſeed ripens into that ſubſtance, or the ſhield in diſeaſe or decay may be changed to it.

*L. incluſus*, figured in our next plate, will be found admirably to illuſtrate the ſtructure of this.







Jun.ª 1.1800 Published by J.ª Powers & Londres.

# LICHEN incluſus.

## *Covered Lichen.*

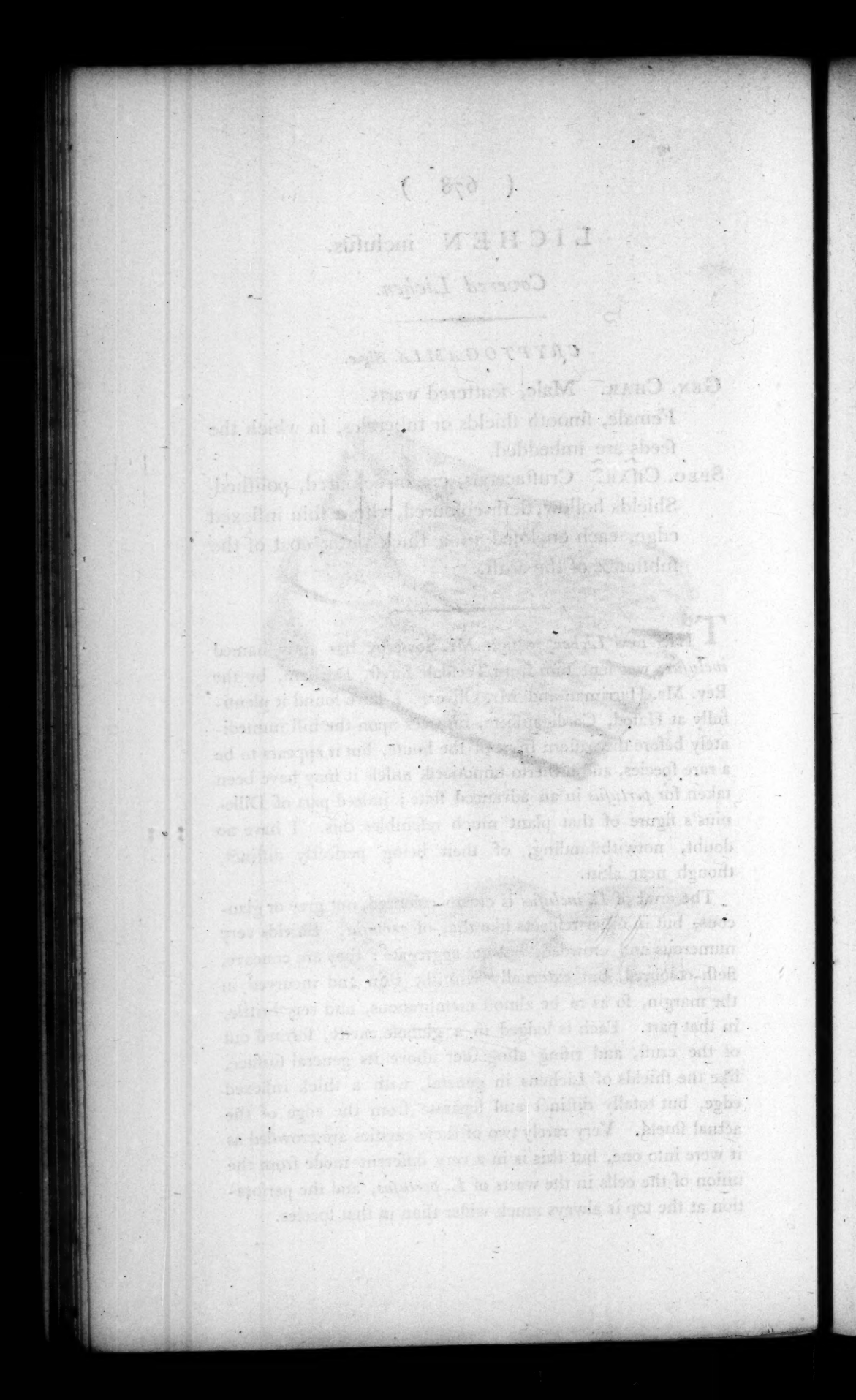
*CRYPTOGAMIA Algæ.*

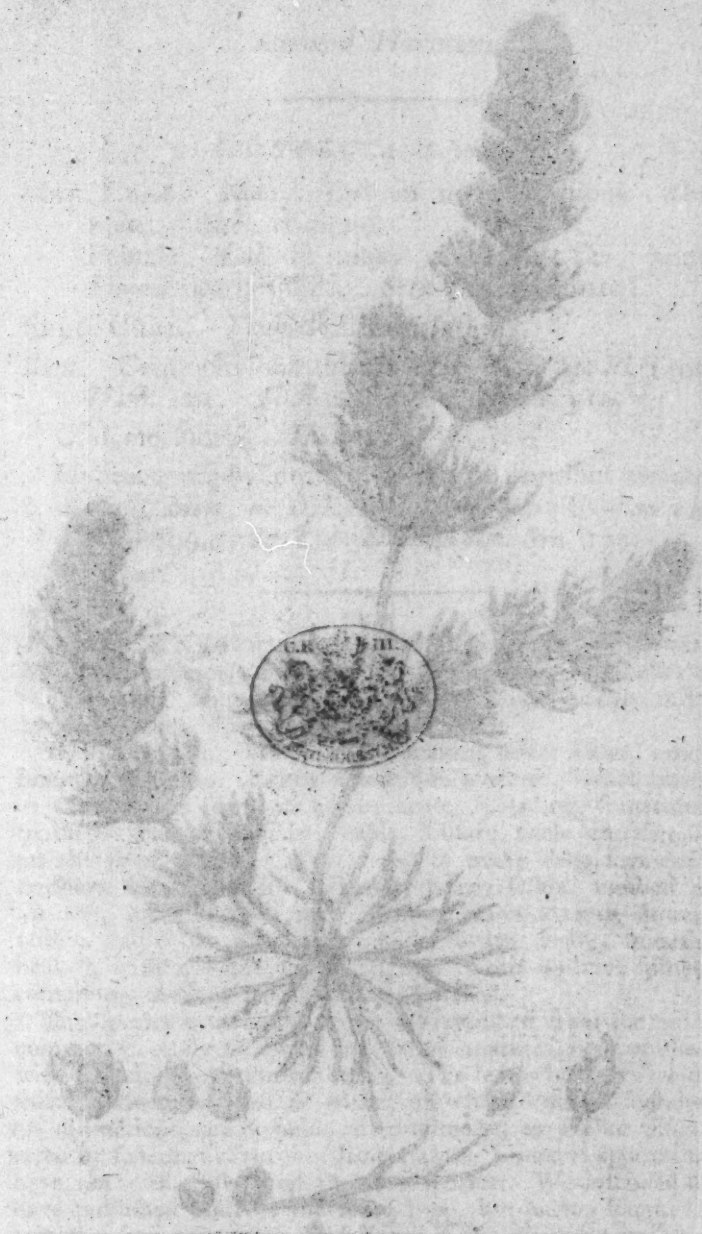
GEN. CHAR. Male, ſcattered warts.
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Cruſtaceous, cream-coloured, poliſhed. Shields hollow, fleſh-coloured, with a thin inflexed edge, each encloſed in a thick outer coat of the ſubſtance of the cruſt.

THIS new *Lichen*, which Mr. Sowerby has aptly named *incluſus*, was ſent him from Teeſdale foreſt, Durham, by the Rev. Mr. Harriman and Mr. Oliver. I have found it plentifully at Hafod, Cardiganſhire, on trees upon the hill immediately before the eaſtern front of the houſe, but it appears to be a rare ſpecies, and hitherto unnoticed, unleſs it may have been taken for *pertuſus* in an advanced ſtate; indeed part of Dillenius's figure of that plant much reſembles this. I have no doubt, notwithſtanding, of their being perfectly diſtinct, though near akin.

The cruſt of *L. incluſus* is cream-coloured, not grey or glaucous, but in other reſpects like that of *pertuſus*. Shields very numerous and crowded, but not aggregate; they are concave, fleſh-coloured, but externally whitiſh, thin and incurved in the margin, ſo as to be almoſt membranous, and very brittle, in that part. Each is lodged in a globoſe cavity, formed out of the cruſt, and riſing altogether above its general ſurface, like the ſhields of Lichens in general, with a thick inflexed edge, but totally diſtinct and ſeparate from the edge of the actual ſhield. Very rarely two of theſe cavities are crowded as it were into one, but this is in a very different mode from the union of the cells in the warts of *L. pertuſus*, and the perforation at the top is always much wider than in that ſpecies.







Published by J. Sowerby London.

# CERATOPHYLLUM ſubmerſum.

## *Unarmed Hornwort.*

*MONOECIA Polyandria.*

GEN. CHAR. Male. *Cal.* in many diviſions. *Cor.* none. *Stam.* 16 to 20.

Female. *Cal.* in many diviſions. *Cor.* none. *Stigma* nearly ſeſſile. *Seed* ſolitary, coated.

SPEC. CHAR. Fruit deſtitute of ſpines.

SYN. Ceratophyllum ſubmerſum. *Linn. Sp. Pl.* 1409. *With.* 441. *Hull.* 211. *Fl. Dan. t.* 510.

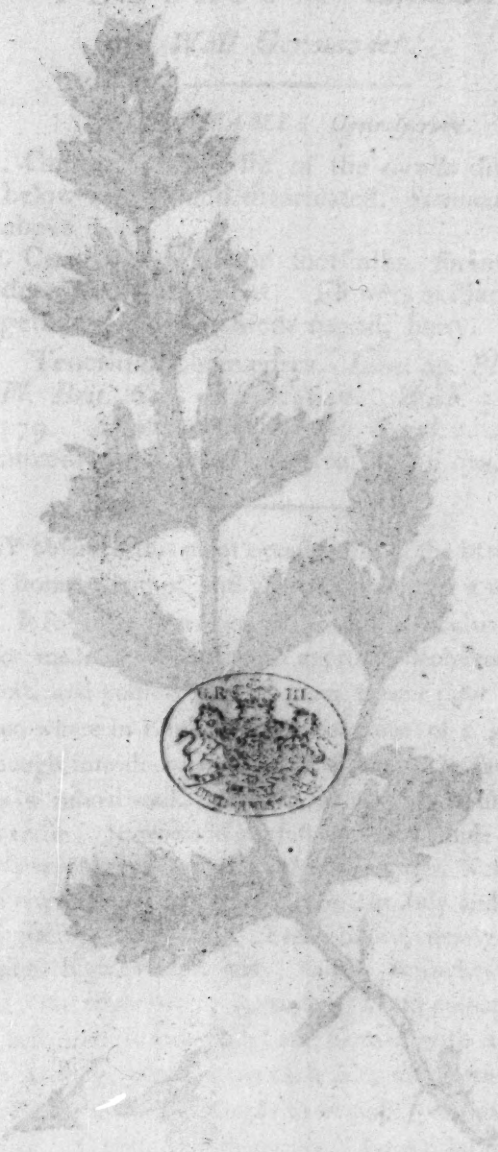
C. demerſum β. *Hudſ.* 419.

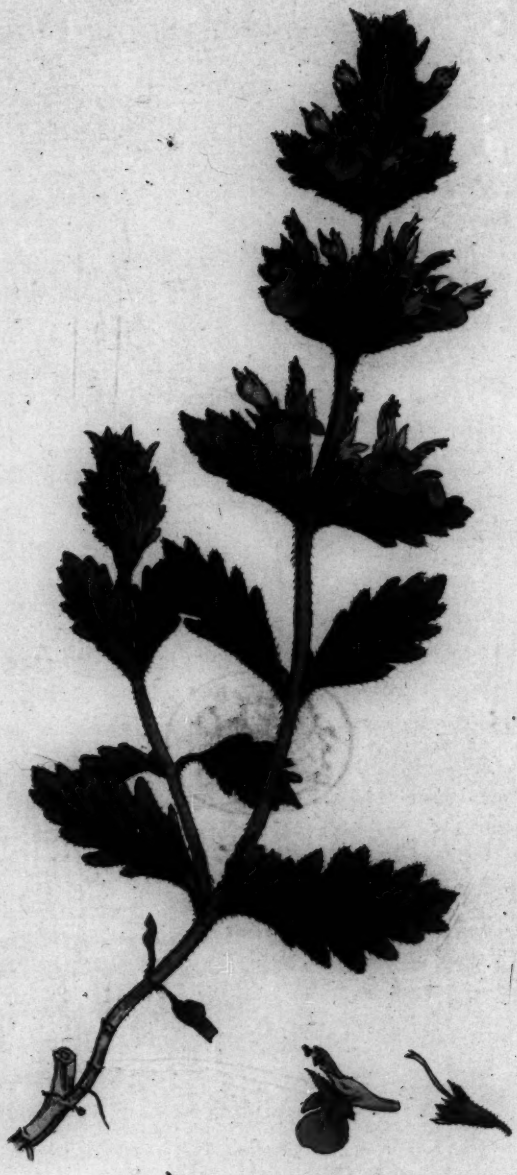
Hydroceratophyllon folio lævi, octo cornibus armato. *Vaill. Mem. de l'Acad. des Sciences (German edition)* 299. *t.* 15. *f.* 2. *Dill. in Raii Syn.* 135.

DILLENIUS mentions his finding this plant, with Mr. Manningham, in ditches by the road from Chicheſter to Selſey iſland. Our ſpecimen was gathered near Yarmouth by Mr. D. Turner, flowering in September.

Root perennial. Whole plant floating under water, much branched, ſlender. Leaves about 8 in a whorl, forked twice or thrice, their ſegments linear, acute, ſpreading, ſometimes toothed. Flowers axillary, ſeſſile, ſolitary, male and female on the ſame plant. Calyx green, in many deep ſegments. Antheræ large, roundiſh, gibbous, nearly ſeſſile, toothed at the top, ſpeckled with red. Germen in a ſeparate flower, with a calyx like that of the male, ovate, acute, ſmooth, beaked, with a ſeſſile ſimple ſtigma. Fruit without ſpines, containing one large, oval, compreſſed ſeed.

This ſpecies is certainly to be diſtinguiſhed from the more common C. *demerſum* by its fruit being unarmed, not furniſhed with 3 long divaricating thorns. The leaves being twice or thrice divided, toothed or entire, on which Vaillant founded his diſtinctions, are variable circumſtances, as Haller diſcovered by ſpecimens ſent him from Paris. Linnæus appears to have not well underſtood the two ſpecies. We intended to have publiſhed both at the ſame time, but having ſought in vain this ſeaſon for the fructification of the common one, we would not keep back ſo little known a plant as that here exhibited.


G.R. III.



Jan.y 1.1800 Published by J. Sowerby London.

# TEUCRIUM Chamædrys.

## *Wall Germander.*

*DIDYNAMIA Gymnoſpermia.*

GEN. CHAR. Upper lip of the *corolla* divided down below its baſe and divaricated. *Stamina* projecting above it.

SPEC. CHAR. Leaves on footſtalks, ſomewhat ovate, deeply crenate or cut. Flowers axillary, three together, ſtalked. Stem round, hairy.

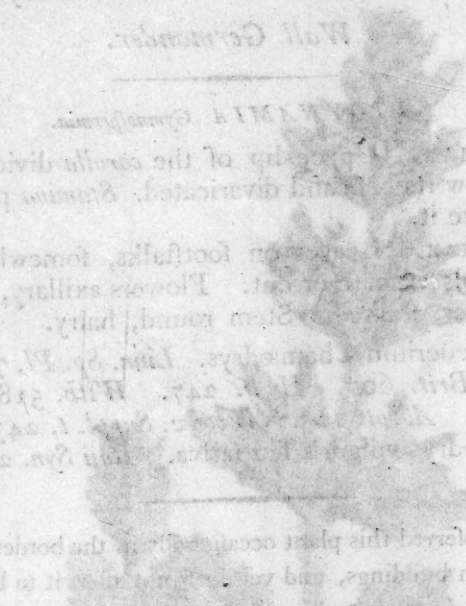
SYN. Teucrium Chamædrys. *Linn. Sp. Pl.* 790. *Sm. Fl. Brit.* 607. *Hudſ.* 247. *With.* 518. *Sibth.* 179. *Abbot.* 125. *Woodv. Suppl. t.* 243.
Chamædrys vulgaris ſeu ſativa. *Raii Syn.* 231.

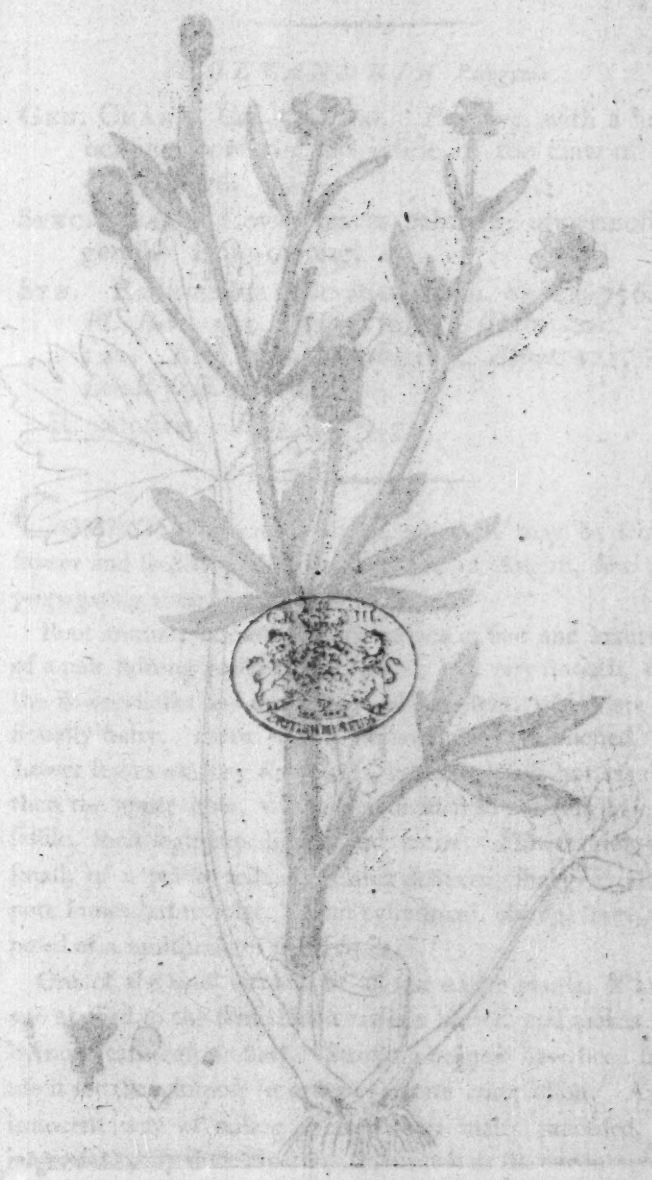
RAY obſerved this plant occaſionally in the borders of fields remote from buildings, and yet durſt not aſſert it to be indigenous. It ſeems to have been formerly much cultivated in gardens for medical uſe, being an approved deobſtruent and expectorant, and poſſibly eſcaped from thence; for it has certainly no where in England the appearance of a genuine native, though introduced into all our Floras. Its favourite ſituation is a ruined wall. Sherard found it plentifully on Winchelſea caſtle. It grows in profuſion on the inſide of the city wall between Magdalen and St. Auſtin's gates, Norwich, from whence our ſpecimens came, flowering in July and Auguſt.

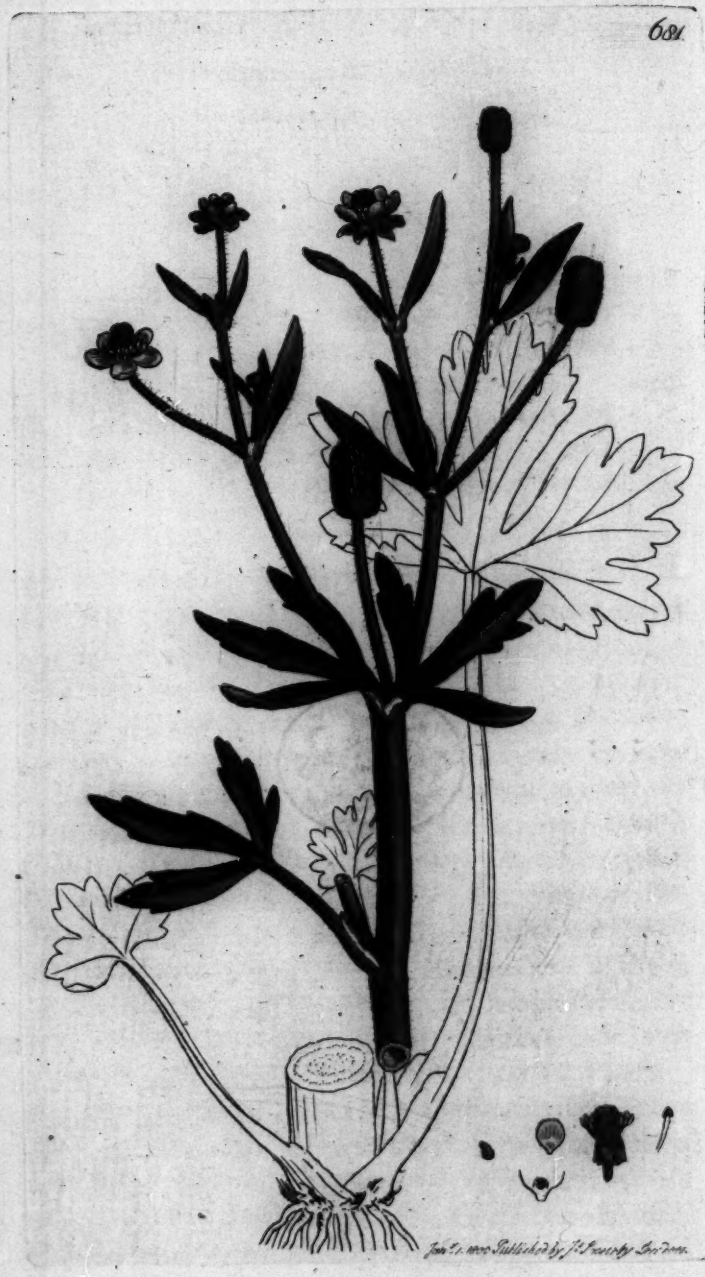
Root creeping, perennial. Stem buſhy, nearly upright, 6 or 8 inches high, round, leafy, hairy. Branches and leaves oppoſite; the latter ovate, variouſly cut and crenate, tapering at the baſe into a foot-ſtalk, and clothed with a few hairs. Flowers axillary, about 3 on each ſide, and forming a leafy ſpike. Each ſtands on a ſimple ſhort ſtalk. Calyx campanulate, hairy. Corolla reddiſh-purple. Lower lip with a large round concave central lobe, and 2 ſmall ſharp lateral ones; what ſhould be the upper lip conſiſts of 2 other erect parallel very ſharp lateral lobes, between which the ſtamina and ſtyle project upwards, forming the ſtriking generic character of *Teucrium*. Seeds 4, naked. Whole herb very bitter.

# TEUCRIUM Chamædrys.

## Wall Germander.







Jan.1.1806 Published by J.Sowerby Londres

# RANUNCULUS ſceleratus,

## *Celery-leaved Crowfoot.*

*POLYANDRIA Polygynia.*

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5, with a honey-bearing pore on the inſide of the claw of each. *Seeds* naked.

SPEC. CHAR. Lower leaves palmate; uppermoſt fingered. Fruit oblong.

SYN. Ranunculus ſceleratus. *Linn. Sp. Pl.* 776. *Sm. Fl. Brit.* 590. *Huds.* 241. *With.* 505. *Hull.* 121. *Relh.* 212. *Sibth.* 173. *Abbot.* 121. *Curt. Lond. faſc.* 2. *t.* 42.

R. paluſtris. *Raii Syn.* 249.

COMMON in watery places, where it may be found in flower and ſeed from June to the end of Auguſt, few plants propagating their ſpecies more copiouſly.

Root annual, fibrous. Herb various in ſize and luxuriance, of a pale ſhining green colour, juicy, and very ſmooth, except the flower-ſtalks and upper part of the ſtem, which are occaſionally hairy. Stem round, hollow, thick, branched, leafy. Lower leaves on long foot-ſtalks, lobed and cut, but leſs deeply than the upper ones, which are divided to the very baſe, and ſeſſile, their ſegments linear and entire. Flowers numerous, ſmall, of a paliſh yellow. Calyx deflexed, ſhaggy. Honey-pore ſomewhat tubular. Fruit cylindrical, obtuſe, ſhort, compoſed of a multitude of ſmall ſeeds.

One of the moſt virulent of all our native plants. If bruiſed and applied to the ſkin it ſoon raiſes a bliſter, and makes a ſore by no means eaſy to heal. Strolling beggars have been ſaid to uſe it for that purpoſe in order to excite compaſſion. A more innocent way of raiſing money than many practiſed, on a larger ſcale, by their ſuperiors, inaſmuch as the encouragement of public virtues (however miſapplied) is ſurely better than that of public vices.


G.R.
III.



Jan.ʸ 1. 1800 Published by I. Sowerby Brittain

# ONONIS arvenſis.

## *Reſt-harrow.*

*DIADELPHIA Decandria.*

GEN. CHAR. *Cal.* 5-cleft, its diviſions linear. *Standard* ſtriated. *Pod* turgid, rhomboid, ſeſſile. *Filaments* in one undivided ſet.

SPEC. CHAR. Stem hairy. Branches at length ſpinous. Flowers moſtly ſolitary. Leaves generally ſimple, entire towards their baſe.

SYN. Ononis arvenſis. *Lightf.* 386. *Relh.* 270.

α. O. arvenſis. *With.* 627. *Hull.* 160. *Sibth.* 220. *Abbot.* 155.

O. inermis α. *Hudſ.* 313.

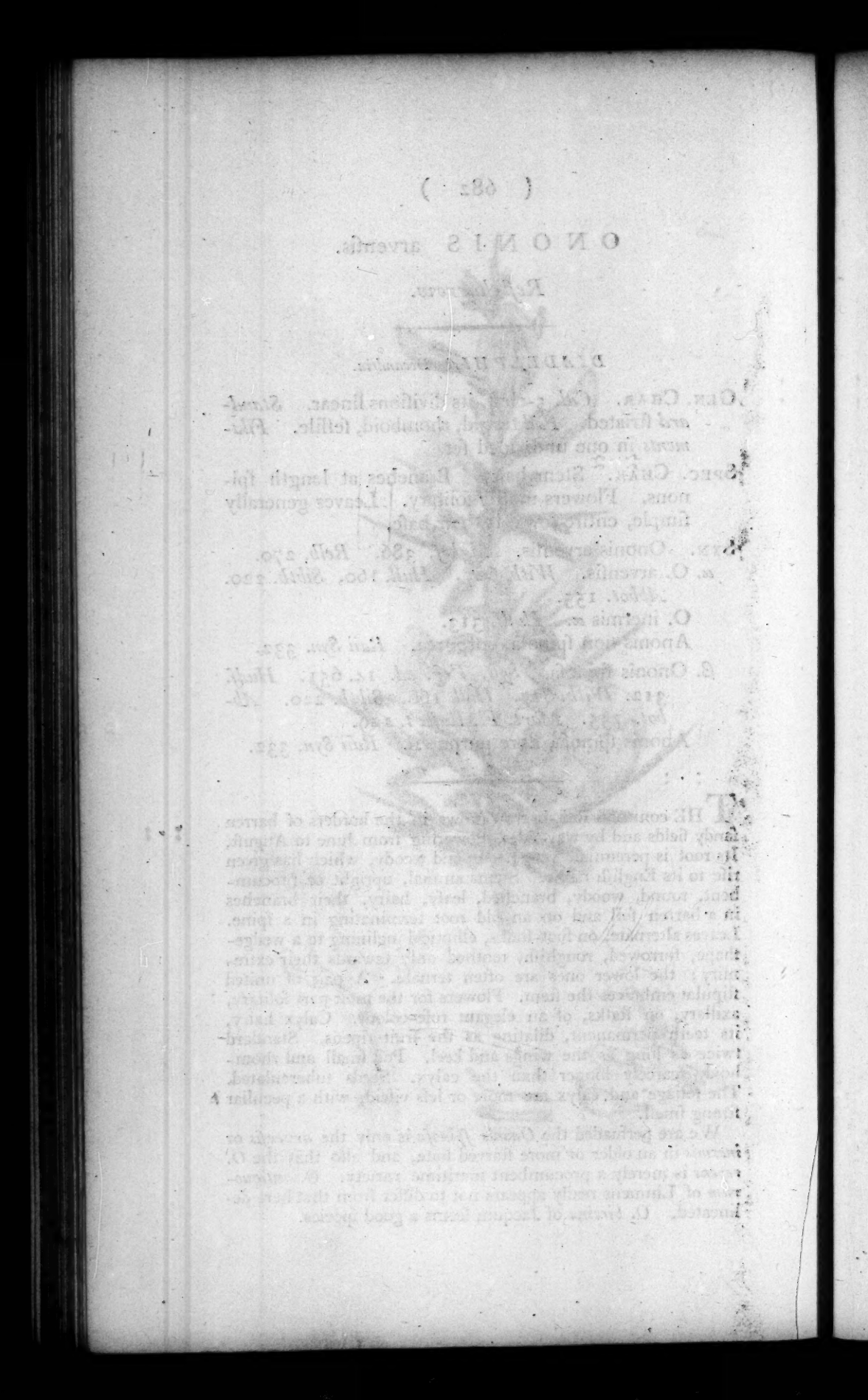
Anonis non ſpinoſa, purpurea. *Raii Syn.* 332.

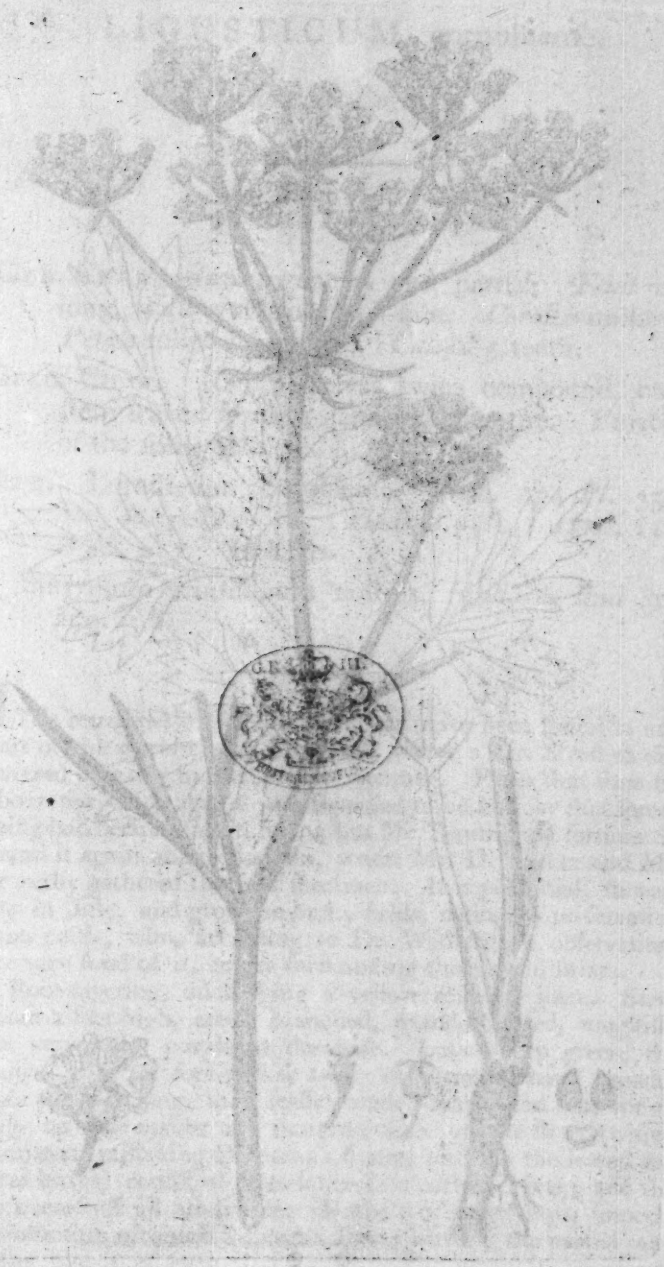
β. Ononis ſpinoſa. *Syſt. Veg. ed.* 14. 651. *Hudſ.* 312. *With.* 627. *Hull.* 160. *Sibth.* 220. *Abbot.* 155. *Mart. Fl. Ruſt. t.* 129.

Anonis ſpinoſa, flore purpureo. *Raii Syn.* 332.

THE common Reſt-harrow grows in the borders of barren ſandy fields and by way-ſides, flowering from June to Auguſt. Its root is perennial, very ſtrong and woody, which has given riſe to its Engliſh name. Stems annual, upright or procumbent, round, woody, branched, leafy, hairy, their branches in a barren ſoil and on an old root terminating in a ſpine. Leaves alternate, on foot-ſtalks, elliptical inclining to a wedge-ſhape, furrowed, roughiſh, toothed only towards their extremity; the lower ones are often ternate. A pair of united ſtipulæ embraces the ſtem. Flowers for the moſt part ſolitary, axillary, on ſtalks, of an elegant roſe-colour. Calyx hairy, its teeth permanent, dilating as the fruit ripens. Standard twice as long as the wings and keel. Pod ſmall and rhomboid, ſcarcely longer than the calyx. Seeds tuberculated. The foliage and calyx are more or leſs viſcid, with a peculiar ſtrong ſmell.

We are perſuaded the *Ononis ſpinoſa* is only the *arvenſis* or *inermis* in an older or more ſtarved ſtate, and alſo that the *O. repens* is merely a procumbent maritime variety. *O. antiquorum* of Linnæus really appears not to differ from that here delineated. *O. hircina* of Jacquin ſeems a good ſpecies.







Jan.y 1. 1800 Published by J.s Sowerby London.

# LIGUSTICUM cornubienſe.

## *Corniſh Lovage.*

*PENTANDRIA Digynia.*

GEN. CHAR. *Involucrum* general and partial. *Fruit* oblong, with 3 ribs on each ſide. *Corollæ* uniform. *Petals* rolled in, entire. *Calyx* of 5 teeth.

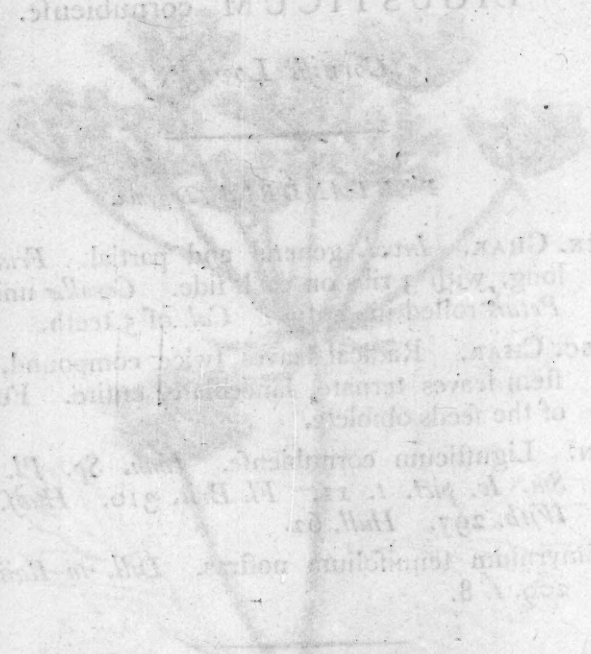
SPEC. CHAR. Radical leaves twice compound, cut; ſtem-leaves ternate, lanceolate, entire. Furrows of the ſeeds obſolete.

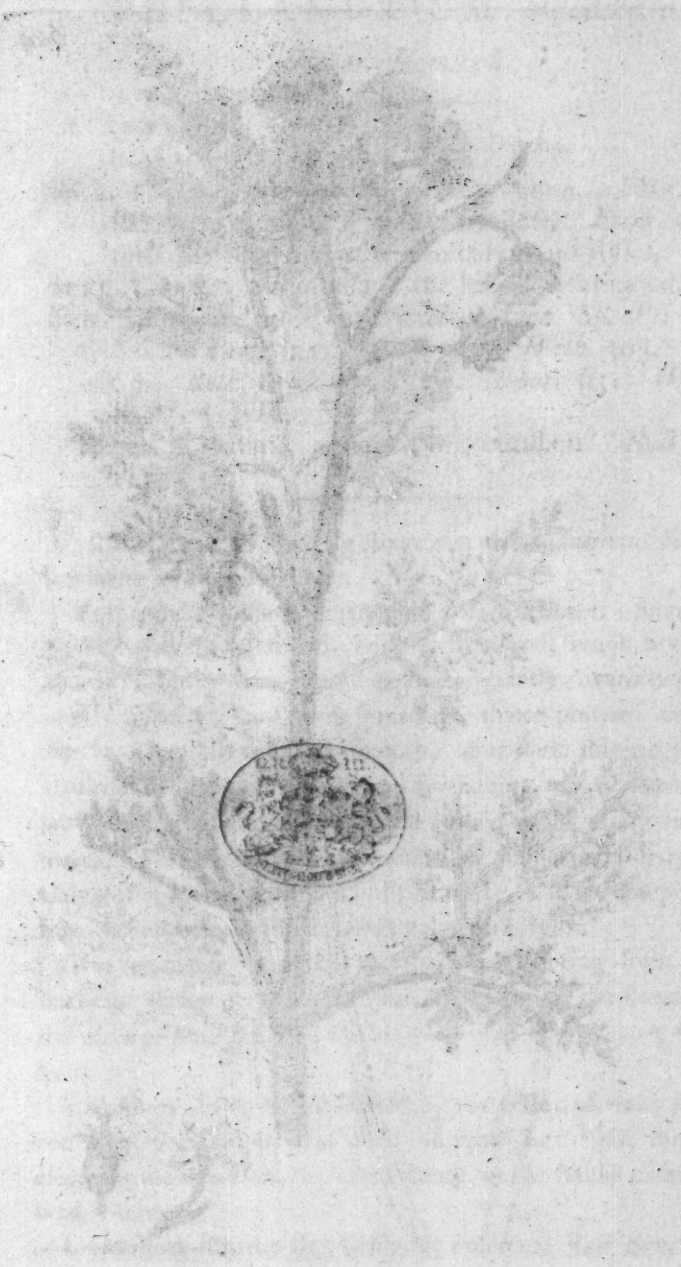
SYN. Liguſticum cornubienſe. *Linn. Sp. Pl.* 359. *Sm. Ic. pict. t.* 11. *Fl. Brit.* 310. *Hudſ.* 118. *With.* 297. *Hull.* 62.

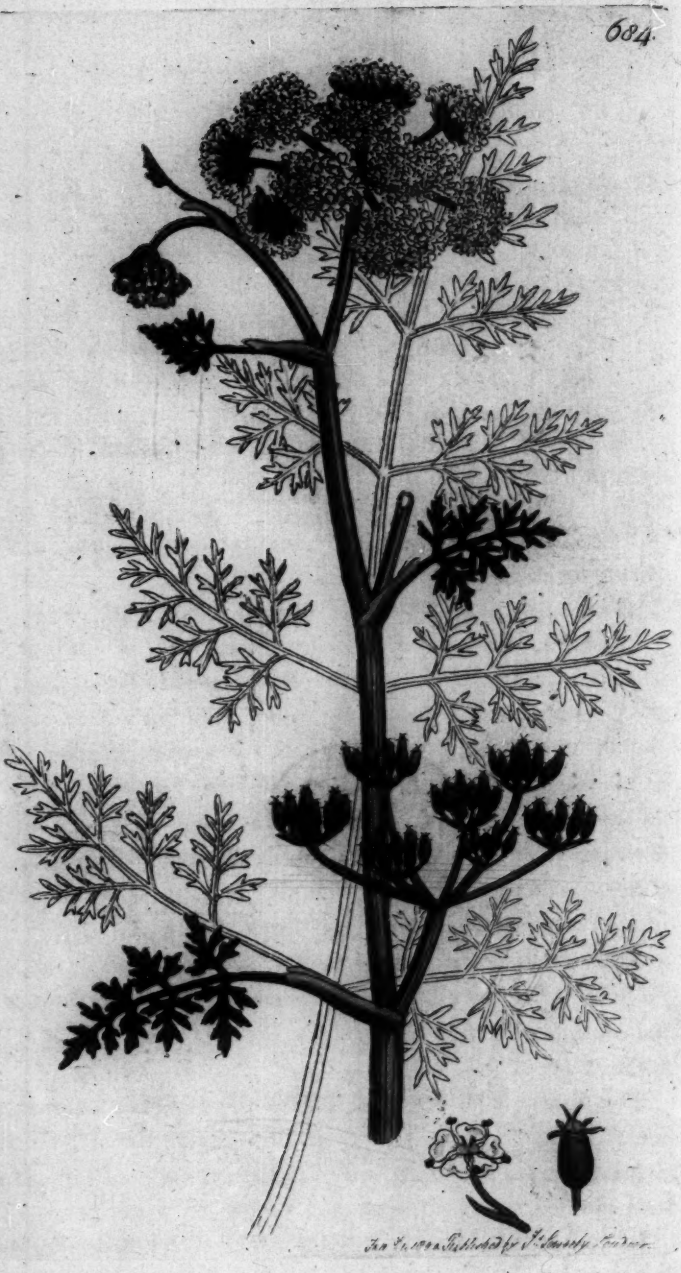
Smyrnium tenuifolium noſtras. *Dill. in Raii Syn.* 209. *t.* 8.

IT is remarkable that this plant has never been found in any part of the world except Cornwall, where a Mr. Steevens diſcovered it early in the preſent century. From that time till about ten years ago it was ſuppoſed to be loſt, or that ſomething had been miſtaken for it; but Mr. Pennington fortunately found it again about Bodmin, where Mr. D. Turner and Mr. Sowerby gathered this wild ſpecimen. It is perennial, flowering in July, and grows in buſhy fields, owing its preſervation from cattle, who, according to Dr. Withering's obſervation, are very fond of it, to the ſurrounding thorns and briars.

Root tapering, diſcharging a yellow reſinous juice. Stem about 2 feet high, erect, branched, round, ſtriated, roughiſh, not very leafy, purple at the baſe. Leaves deep green, the radical ones on foot-ſtalks, twice or thrice ternate, broader than they are long, their leaflets wedge-ſhaped and cut, rough only on the nerves and margin; thoſe on the ſtem (which Linnæus, miſtaking Dillenius's figure, took for the loweſt radical leaves) conſiſt of three lanceolate entire leaflets; and the uppermoſt of all are ſimple. Umbels of many rays, ſmooth. Involucrum of about 8 ſhortiſh linear leaves; the partial ones being like it in form, but ſmaller. Flowers white, uniform, and nearly regular; the ſharp points of their petals rolled in. Fruit ovato-oblong, ſtriated on each ſide, the ribs not very prominent. Seeds ovate, black.







# PHELLANDRIUM aquaticum.

## *Water Hemlock.*

*PENTANDRIA Digynia.*

GEN. CHAR. *General Involucrum* none. *Florets* all fertile, the central ones ſmalleſt. *Fruit* ovate, ſmooth, crowned with the calyx and ſtyles.

SPEC. CHAR. Segments of the leaves divaricated.

SYN. Phellandrium aquaticum. *Linn. Sp. Pl.* 366. *Sm. Fl. Brit.* 321. *Hudſ.* 122. *With.* 303. *Hull.* 63. *Relh.* 119. *Sibth.* 99. *Abbot.* 65. *Woodv. Suppl. t.* 266.

P. vel Cicutaria aquatica quorundam. *Raii Syn.* 215.

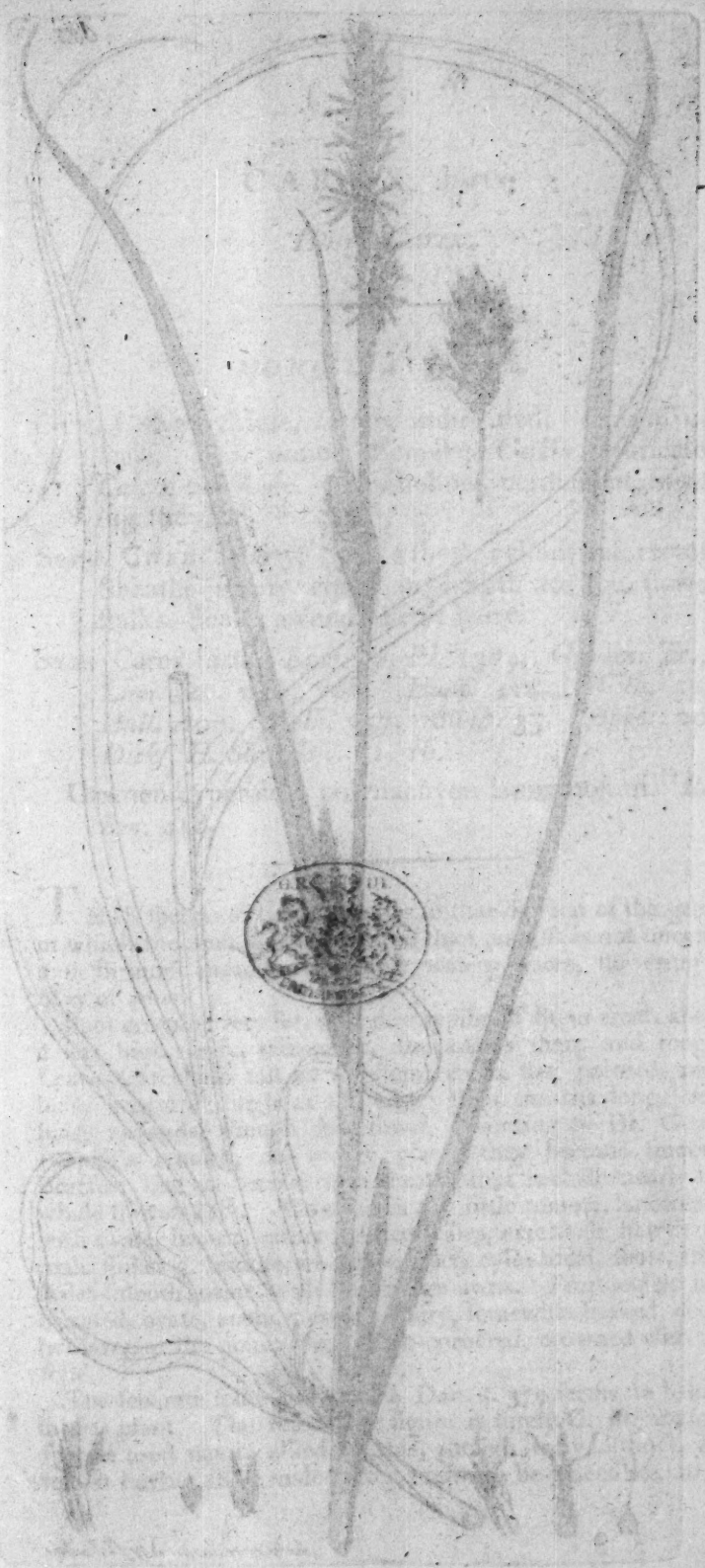
FREQUENT in running ſtreams as well as ſtagnant ditches, flowering in June and July.

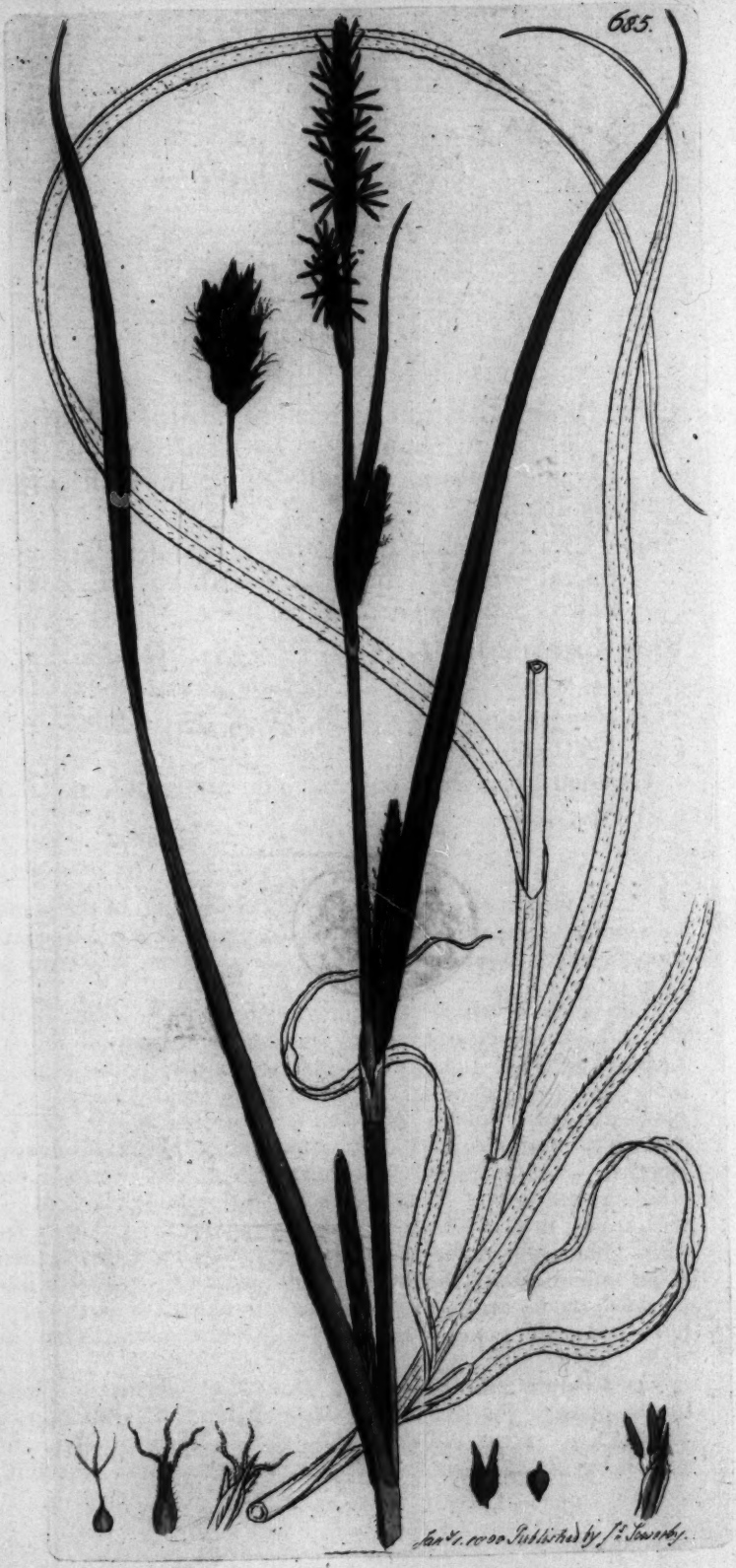
Root ſpindle-ſhaped, thick, with whorled fibres. Stem 2 or 3 feet high, thick, round, hollow, furrowed, much branched and very buſhy, the branches being greatly divaricated and moſtly horizontal. Leaves ſpreading, thrice pinnate, cut, all the ſegments divaricated, ſmooth, of a dark ſhining green. Umbels oppoſite to the leaves, ſpreading, many-rayed; the partial ones very denſe. Partial involucra of many narrow leaves. Flowers white, the outermoſt larger and irregular. Calyx of 5 ſpreading leaves. Fruit ovate, a little compreſſed, ſmooth, crowned with the erect calyx and ſtyles.

This genus is next akin to *Oenanthe*, differing from it in the want of a general involucrum, in having all the flowers for the moſt part fertile, and in the want of a ſpongy coat to the ſeeds.

The fibres of the ſtem diſſected by the action of water in the courſe of the winter, and then bleached in the air, form an elegant tube of net-work, often found on the banks of marſh-land ditches.

In running ſtreams, as Dillenius obſerves, *Raii Syn.* 216, the leaves are lengthened out, and the flowers are rarely produced. Mr. Crowe has obſerved a remarkable variety, if not a ſpecies, which grows upon dry land.





Jan.y 1. 1800 Published by J.s Sowerby.

# CAREX hirta.

## *Hairy Carex.*

*MONŒCIA Triandria.*

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of one ſcale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of one ſcale. *Cor.* hollow, permanent, inveſting the *ſeed.*

SPEC. CHAR. Hairy. Spikes ſhort, cylindrical, remote. Sheaths nearly equal in length to the flower-ſtalks. Scales awned. Fruit hairy.

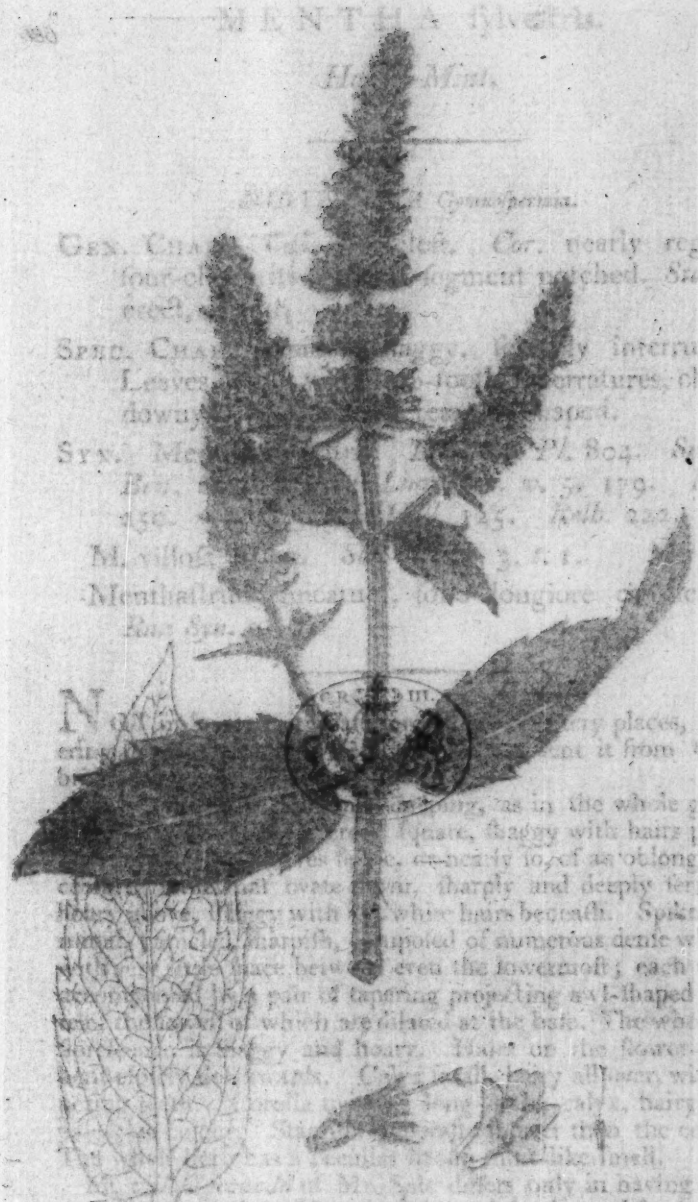
SYN. Carex hirta. *Linn. Sp. Pl.* 1389. *Gooden. Tr. of Linn. Soc. v.* 2. 208. *Hudſ.* 414. *With.* 111. *Hull.* 209. *Relh.* 357. *Sibth.* 33. *Abbot.* 207. *Dickſ. H. Sicc. faſc.* 11. 16.

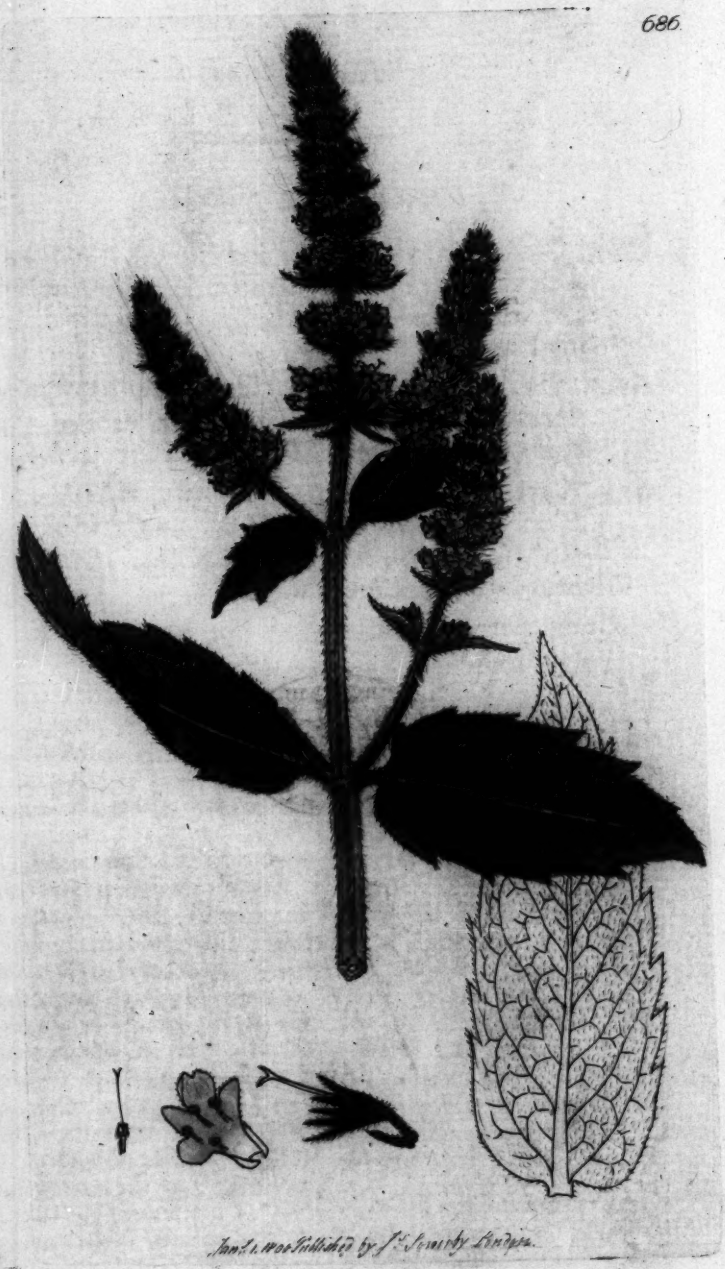
Gramen cyperoides polyſtachyon lanuginoſum. *Raii Syn.* 418.

THIS ſpecies of *Carex* belongs to that diviſion of the genus in which the male ſpikes are more than one. It is not uncommon in moiſt meadows and other watery places, flowering in May or June.

Root creeping very far, with downy fibres. Stem erect, about 2 feet high, leafy, triangular, the angles ſharp and rough. Leaves ſcarcely ſo tall as the ſtem, erect, flat, pointed, moſt hairy beneath, rough at the edge; their ſheaths long, very hairy upwards, though ſometimes, according to Dr. Goodenough's remark, in watery places they become ſmooth. Bracteæ like the leaves, with ſheaths that include nearly the whole flower-ſtalk. Male-ſpikes 2, a little remote, lanceolate, with ovate, brown, rather pointed ſcales, externally hairy; female-ſpikes 3, remote, on ſtalks, erect, cylindrical, ſhort, their ſcales ſmooth, ovate, with long rough awns. Fruit looſely imbricated, ovate, acute, nervous, hairy, ſomewhat beaked, deeply cloven at the point. Seed three-cornered, crowned with the ſtyle.

The ſeparate ſpike only in *Fl. Dan. t.* 379 ſeems to belong to this plant. The reſt of the figure is ſurely C. *filiformis*, a ſpecies moſt nearly allied to this, though truly diſtinct, and which having alſo 2 male ſpikes, ought to be placed next to it.





Jan.ª 1. 1806. Published by J.ª Sowerby London.

# MENTHA ſylveſtris.

## *Horſe Mint.*

*DIDYNAMIA Gymnoſpermia.*

GEN. CHAR. *Cal.* five-cleft. *Cor.* nearly regular, four-cleft; its broadeſt ſegment notched. *Stamina* erect, diſtant.

SPEC. CHAR. Spikes ſhaggy, ſcarcely interrupted. Leaves acute, with deep-toothed ſerratures, chiefly downy beneath. Bracteæ awl-ſhaped.

SYN. Mentha ſylveſtris. *Linn. Sp. Pl.* 804. *Sm. Fl. Brit.* 609. *Tr. of Linn. Soc. v.* 5. 179. *Hudſ.* 250. *With.* 521. *Hull.* 125. *Relh.* 222.

M. villoſa prima. *Sole Mentha.* 3. *t.* 1.

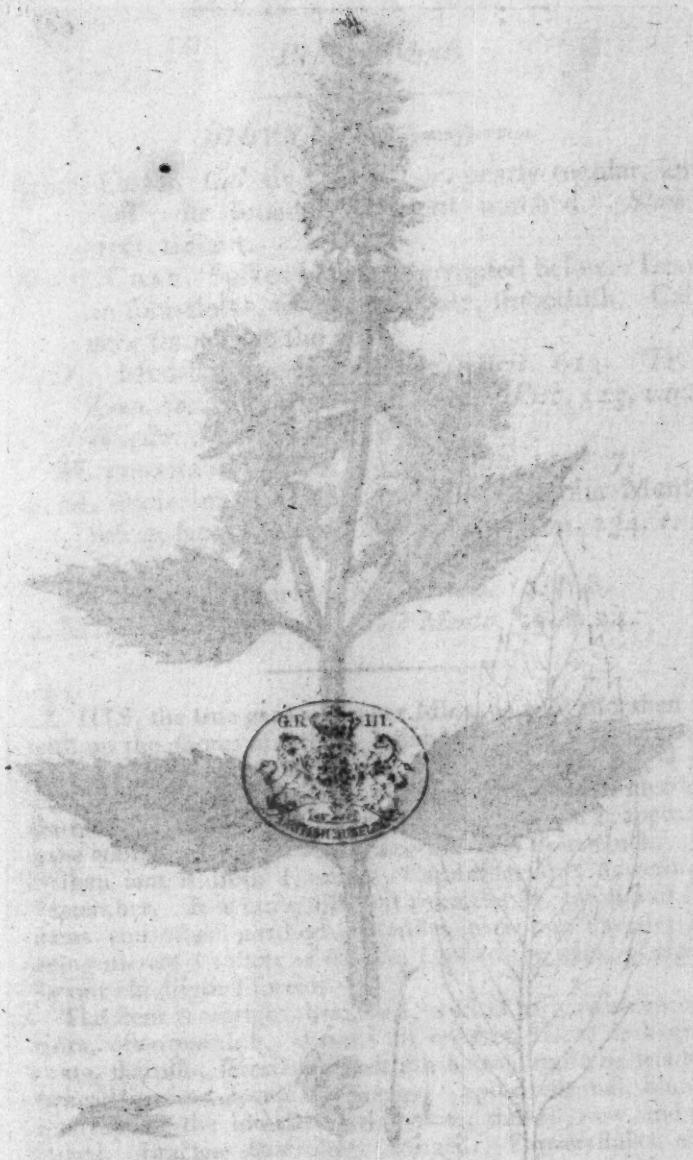
Menthaſtrum ſpicatum, folio longiore candicante. *Raii Syn.* 234.

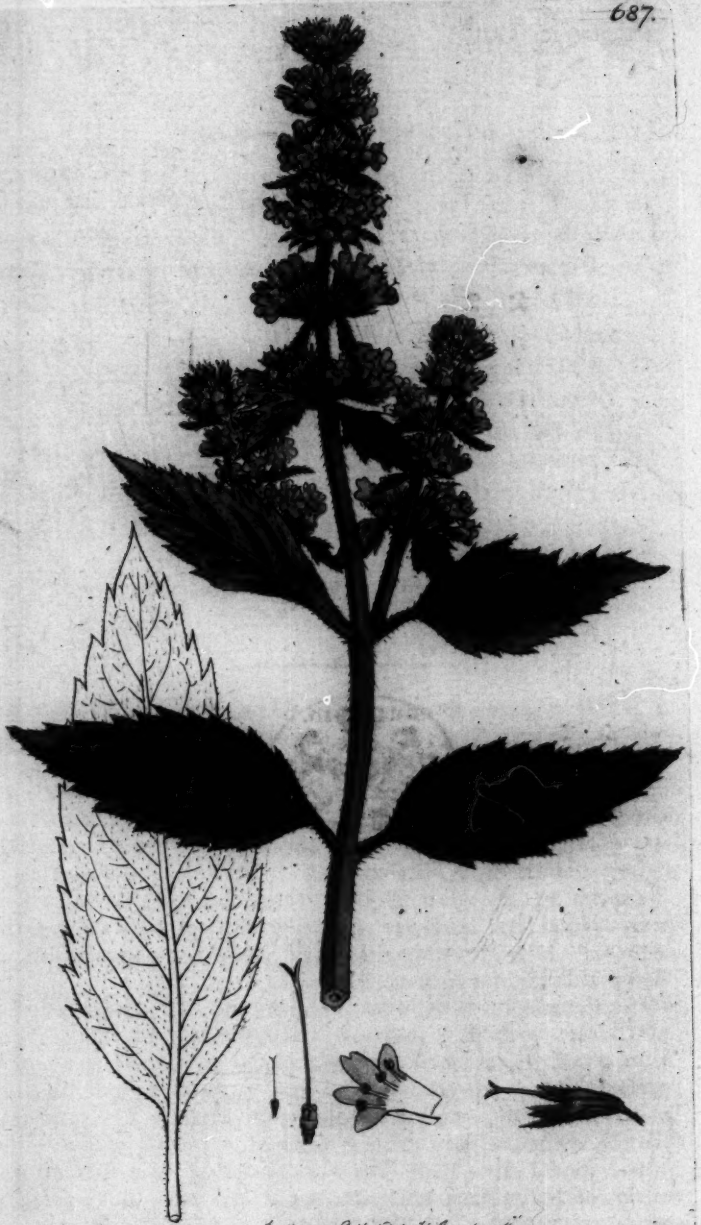
---

NOT unfrequent in waſte ground and watery places, flowering in Auguſt. The Rev. Mr. Relhan ſent it from Cambridgeſhire.

The root is perennial and creeping, as in the whole genus. Stems 2 to 4 feet high, erect, ſquare, ſhaggy with hairs pointing downwards. Leaves ſeſſile, or nearly ſo, of an oblong, lanceolate, ſomewhat ovate form, ſharply and deeply ſerrated, hoary above, ſhaggy with ſoft white hairs beneath. Spikes terminal, panicled, ſharpiſh, compoſed of numerous denſe whorls, with very little ſpace between even the lowermoſt; each whorl accompanied by a pair of tapering projecting awl-ſhaped bracteæ, the loweſt of which are dilated at the baſe. The whole inflorescence is ſhaggy and hoary. Hairs on the flower-ſtalks bent cloſely downwards. Calyx ſmall, hairy all over, with tapering teeth. Corolla twice as long as the calyx, hairy, of a pale lilac colour. Stamina generally ſhorter than the corolla. The whole herb has a peculiar ſtrong mint-like ſmell.

M. *villoſa ſecunda* of Mr. Sole differs only in having more ovate leaves, and the M. *rotundifolia* of the ſame obſerving author appears to us not to be ſpecifically diſtinct. Its leaves are very broad and elliptical. For the true M. *rotundifolia* of Linnæus ſee our *t.* 446. Doody found in Kent a very downy ſweet-ſcented variety of *ſylveſtris*; mentioned in *Raii Syn. ed.* 2. 341.


G.R. III.



Jan.y 1. 1802 Published by J.t Sowerby London.

# MENTHA piperita.

## *Pepper Mint.*

*DIDYNAMIA Gymnoſpermia.*

GEN. CHAR. *Cal.* five-cleft. *Cor.* nearly regular, four-cleft; its broadeſt ſegment notched. *Stamina* erect, diſtant.

SPEC. CHAR. Spikes blunt, interrupted below. Leaves on foot-ſtalks, ſomewhat ovate, ſmoothiſh. Calyx very ſmooth at the baſe.

SYN. Mentha piperita. *Sm. Fl. Brit.* 613. *Tr. of Linn. Soc. v.* 5. 189. *Hudſ.* 251. *With.* 523, *var.* 2. *Woodv. Med. Bot. t.* 169.

M. piperita officinalis. *Sole Mentb.* 15. *t.* 7.

β. M. ſpicis brevioribus et habitioribus, foliis Menthæ fuſcæ, ſapore fervido Piperis. *Raii Syn.* 234. *t.* 10. *f.* 2.

M. piperita vulgaris. *Sole Mentb.* 19. *t.* 8.

γ. M. piperita ſylveſtris. *Sole Mentb.* 53. *t.* 24.

THIS, the true garden Pepper Mint, is now and then met with on the ſhores of brooks indubitably wild, as at Bonſall dale near Matlock, though more frequently the outcaſt of gardens. Dr. Eales, its original diſcoverer, found it in Hertfordſhire in Ray's time, and on his recommendation it appears to have come into general uſe as a cordial and ſtomachick. Mr. Relhan ſent it from Hanxton, Cambridgeſhire, flowering in September. It is quite different from the M. *piperita* of Linnæus and other northern botaniſts, except in flavour; that being merely a variety of *hirſuta*, I retain the name of *piperita* for our old original ſpecies.

The ſtem is upright, branched, a little hairy with recurved hairs, often purpliſh. Leaves all on foot-ſtalks, dark-green, ovate, ſharpiſh, ſerrated, ſmoothiſh above, more or leſs hairy beneath, never downy nor ſhaggy. Spike terminal, bluntiſh, interrupted, the loweſt whorl remote, ſtalked, now and then ſpiked. Bracteæ lanceolate, fringed. Flower-ſtalks either quite ſmooth, or a little hairy upwards. Calyx ſlender, furrowed, dotted, always quite ſmooth at the baſe, the teeth dark-purple and fringed. Corolla purpliſh. Stamina ſhorter than the ſegments.

Variety β has merely ſhorter rounder ſpikes and leaves, and is more commonly found wild; γ has heart-ſhaped ſmoother leaves, and a leſs grateful flavour.

# MENTHA piperita.

## Peppermint.

DIDYNAMIA Gymnospermia.

Gen. Char. Cal. five-cleft, nearly regular, four-cleft; its broadest segment notched. Stamina erect, distant.

Spec. Char. Spikes blunt, interrupted below. Leaves on foot-stalks, lanceolate, acute, smoothish. Calyx very smooth at the base.

Syn. Mentha piperita. Huds. 231. Relh. 247. Sm. Eng. Bot. v. 21. 1469. With. 252. Lightf. 233, var. 2. Woods. Mon. Bot. A. 1809.

M. piperita officinalis. Sole Mem. 1754. 7.

β. M. spicis brevioribus et habitioribus, foliis Mentha sylvestris, saporem acrimo piperis. Haller. Hist. 234. A. 10.

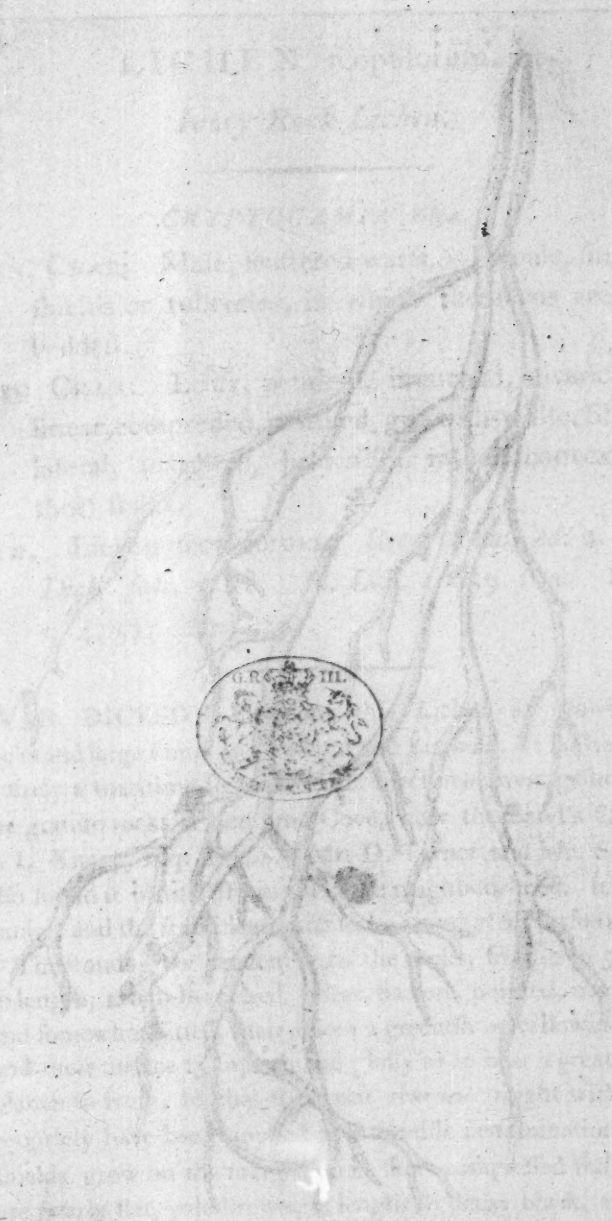
γ. M. piperita vulgaris. Sole Mem. 19. N. 8.

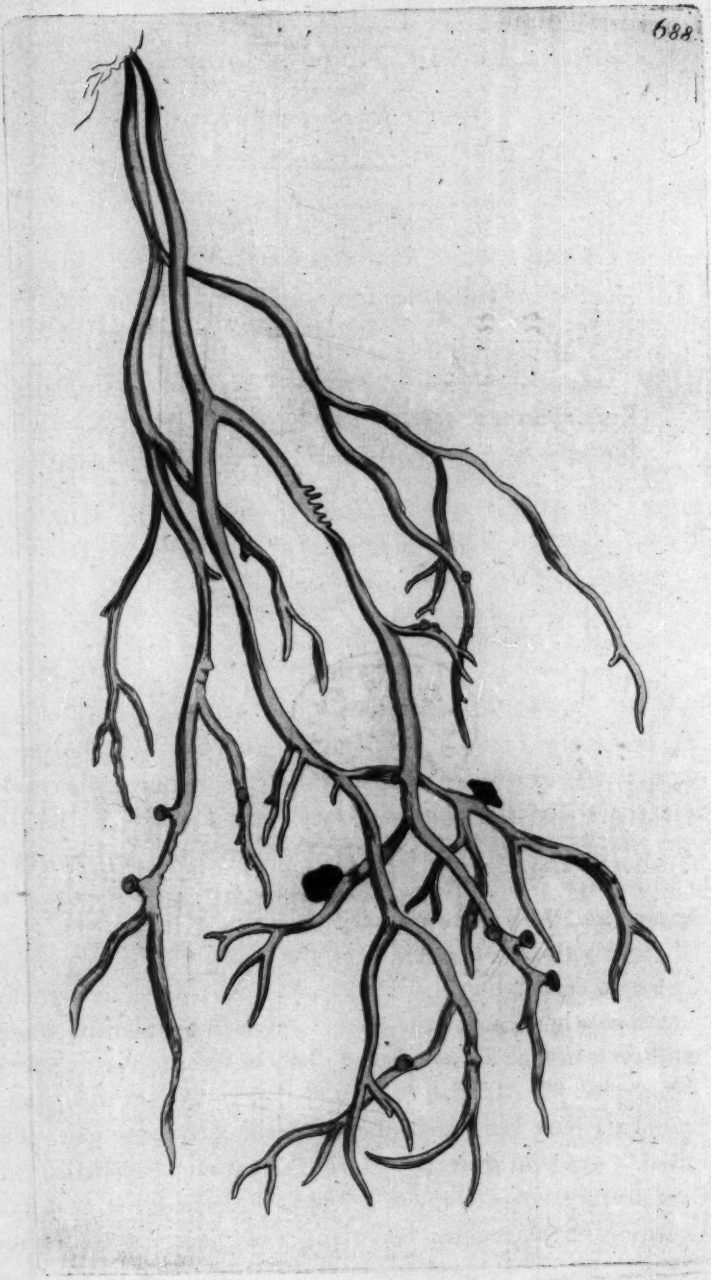
γ. M. piperita? hortensis. Sole Mem. 53. A. 24.

THIS, the true garden Pepper Mint, is now and then met with on the shores of brooks undistinguished with us as Spearmint (*M. viridis*, Smith) there frequently the growth of gardens. The radical difference of found it in Hertfordshire is, I think, such as to communication it appears to have come originally as a cordial and fomentick. Sole. Italian first it from Hanover, Cambridgeshire, flowering in September. It is quite different from the N. Aspera of Linnæus and other northern botanists, except in flavour; that being merely a variety of Aspera. I retain the name of piperita for our old original species.

The stem is upright, branched, a little hairy with recurved hairs, often purplish. Leaves all on foot-stalks, dark-green, acute, sharply serrated, somewhat above, more or less hairy beneath, never downy nor hoary. Spike terminal, slightly interrupted, the lowest whorl remote, naked, very small. Bracteas lanceolate, bristled. Flower-stalks either quite smooth, or a little hairy upwards. Calyx slightly furrowed, dotted, always quite smooth at the base, the teeth dark-purple and fringed. Corolla purplish. Stamina shorter than the segments.

Variety β has merely shorter rounder spikes and leaves, and is more commonly found wild; γ has leaves clasped smoother leaves, and a less gratful flavour.





# LICHEN ſcopulorum.

## *Ivory Rock Lichen.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. Male, ſcattered warts. Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Leafy, pendent, branched, divaricated, linear, compreſſed, poliſhed, greeniſh-white. Shields lateral, marginal, browniſh, rather convex, on ſhort ſtalks.

SYN. Lichen ſcopulorum. *Retz. Prod. ed.* 2. 282. *Dickſ. faſc.* 3. 18. *Fl. Dan. t.* 959. *f.* 2. *With. v.* 4. 57. *Hull.* 297.

MR. DICKSON mentions this Lichen as growing on rocks and large ſtones in Scotland and England. It is, however, entirely a maritime ſpecies. Our ſpecimens were gathered on the granite rocks of Lemorna Cove, near the Land's End, by J. L. Knapp, Eſq. F.L.S. Mr. D. Turner and Mr. Sowerby alſo found it plentifully in the ſame neighbourhood. It is perennial, and the fructification is to be found at all ſeaſons.

The fronds grow pendent from the rocks, from 2 to 5 inches in length, much branched, linear, narrow, pointed, compreſſed and ſomewhat pitted, their colour a greeniſh or yellowiſh white, and their ſurface ſo ſmooth and gloſſy as to bear a great reſemblance to ivory, ſo that the name *eburneus* might with much propriety have been applied as a ſpecific denomination. The ſhields grow on the margin upon ſhort compreſſed ſtalks, and are nearly flat, pale brown, at length in decay black, and their edge is turned backwards; when young they have a narrow brown highly poliſhed border. This ſpecies is of the ſame tribe of Lichens with L. *calicaris*, *fraxineus*, and ſome others. In colour, ſurface, and ſenſible qualities it nearly approaches L. *articulatus*.



Jan.ʸ 1.ˢᵗ 1800 Published by J.ˢ Stewart.

# CONFERVA gelatinoſa.

*Frog-ſpawn Conferva.*

---

*CRYPTOGAMIA Algæ.*

GEN. CHAR. *Seeds* in round, ſolitary, cloſed tubercles, projecting from the frond, but united with it.

SPEC. CHAR. Branches beaded, with whorled compound fibres bearing the fruit and very gelatinous.

SYN. Conferva gelatinoſa. *Linn. Sp. Pl.* 1635. *Huds.* 597. *With. v.* 4. 134. *Hull.* 332. *Relh. Suppl.* 2. 21. *Sibth.* 337. *Abbot.* 275.

C. fontana nodoſa, ſpermatis ranarum inſtar lubrica, major et fuſca. *Dill. Muſc.* 36. *t.* 7. *f.* 42. *Dill. in Raii Syn.* 62.

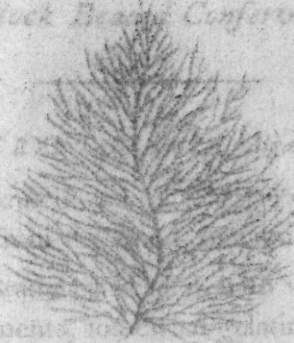
Chara batrachoſperma. *Weis Gott.* 33. *t.* 1.

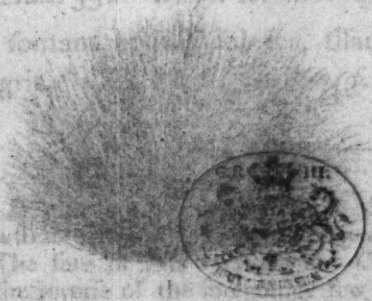
---

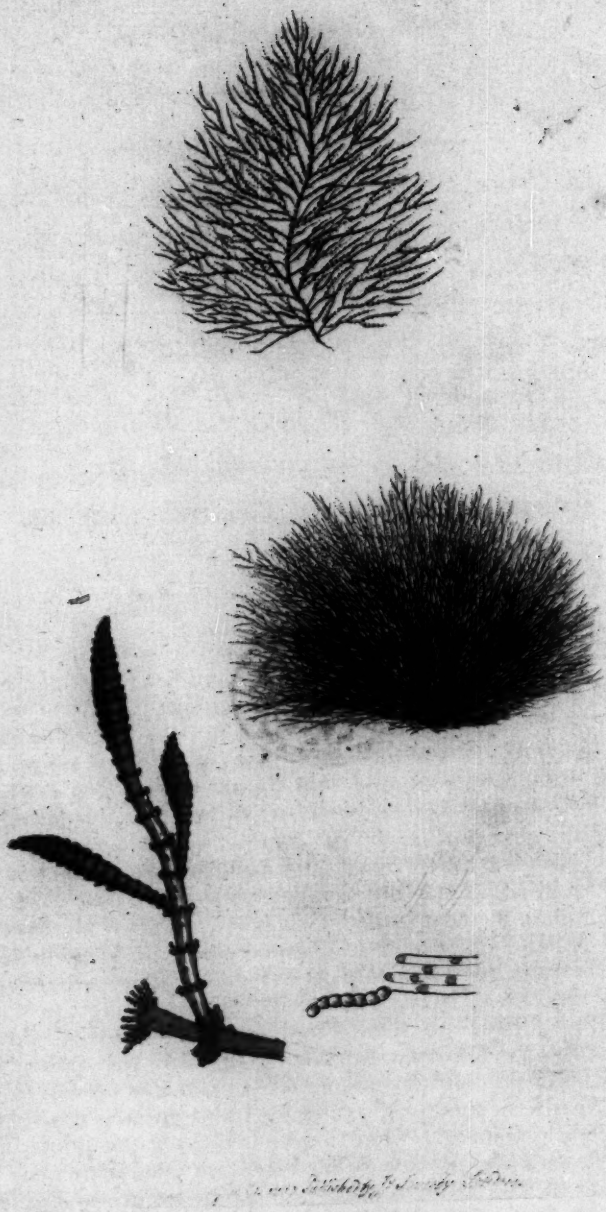
GATHERED in a clear rivulet at Hopton, Suffolk, near Yarmouth, by Mr. D. Turner laſt April. We have found it on Hindolveſton common, Norfolk, and in other places, generally in the ſummer. It is always immerſed in the moſt pellucid waters, growing attached to pebbles, and flowing with the ſtream.

The whole plant is extremely ſlimy and ſlippery to the touch, and very tender; its colour dark green; in ſome varieties paler, in others blueiſh. Stem very much branched, and apparently compoſed of thick-ſet bead-like joints, each of which is in fact a whorl of minute compound filaments, every compound filament ſuſtaining one fruit.

Mr. Turner juſtly obſerves that Weis, who has given a moſt elaborate deſcription and excellent figure of this plant, would never have thought it a *Chara* if that genus had been then well known, or if he had, by a reſidence on the ſea ſhore, been acquainted with the fructification of real *Confervæ*; ſee C. *byſſoides*, *t.* 547. Mr. Turner ſuſpects that Hudſon's variety *β*, *fig.* 43 of Dillenius, may be a diſtinct ſpecies, the ramification, when examined under a microſcope, being diſſimilar. —The ſtem of C. *gelatinoſa*, highly magnified, appears to be an almoſt colourleſs tranſparent membrane, jointed like moſt of the genus.







# CONFERVA atra.

## *Black Beaded Conferva.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. *Seeds* in round, ſolitary, cloſed tubercles, projecting from the frond, but united with it.

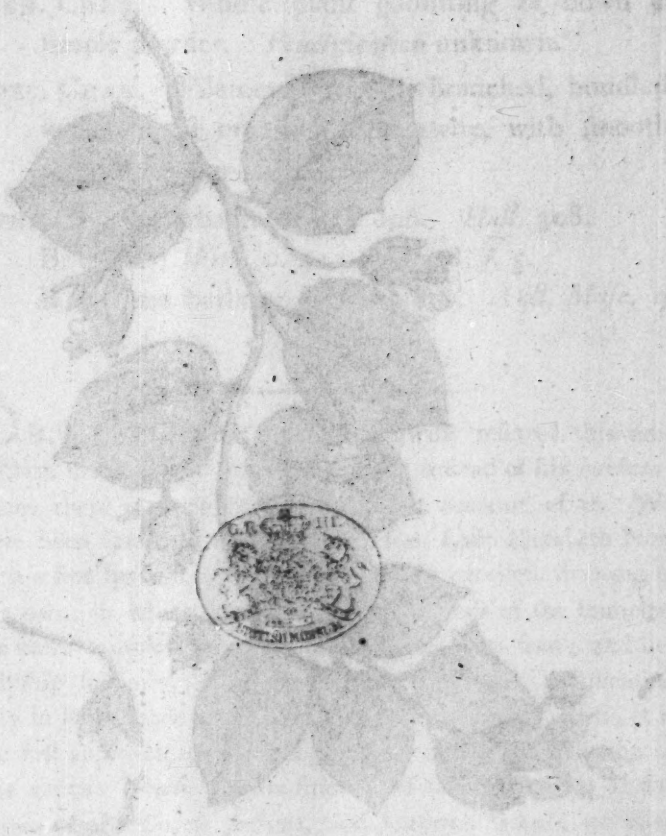
SPEC. CHAR. Branches beaded, with whorled, ſimple, jointed filaments, ſomewhat gelatinous, blackiſh in decay.

SYN. Conferva atra. *Hudſ.* 597. *With. v.* 4. 134. *Hull.* 332. *Dickſ. H. Sicc. faſc.* 13. 25.

C. fontana nodoſa lubrica, filamentis tenuiſſimis nigris. *Dill. Muſc.* 39. *t.* 7. *f.* 46.

WE have received this alſo from Mr. D. Turner, and cannot illuſtrate it better than in his own words.

"The fate of this very elegant *Conferva* ſeems to have been the reverſe of the foregoing, few having been more univerſally noticed than the one, and few more neglected than the other. Excepting Dillenius, whoſe figure well expreſſes its general appearance, ſcarcely any author ſeems to have deſcribed it from his own obſervation. Mr. Dickſon has found it on Wimbledon common, and our ſpecimen was gathered in the ſame brook with the preceding. It begins to appear in the end of March, conſiſting of ſhort extremely delicate filaments, irregularly branched; of a pale green; and continues increaſing till the middle of May, when it is in perfection, the ſtems being then about 1½ inch long, buſhy, of a darker green, almoſt black at the baſe, but not ſufficiently to juſtify the name, except when dried. From this period it gradually decays, loſes its finer parts, becomes rigid, and by the beginning of Auguſt completely diſappears. The ſtem is ſwollen at the joints, and whorled with minute fine jointed ſhort ſimple filaments. It differs at firſt ſight from C. *gelatinoſa* in texture and thickneſs, and from C. *fluviatilis* in both theſe reſpects, as well as colour and ramification. It cannot be confounded with any other known Britiſh ſpecies."



Macrocarpaea glauca, Gilg et Pilger in Engler et Prantl

# BYSSUS barbata.

## *Bearded Yellow Byſſus.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. Whole plant conſiſting of down or ſimple powder. *Fructification* unknown.

SPEC. CHAR. Filaments upright, branched, bundled, with annual interruptions, tawny, with ſmooth, ſwelled, deeper-coloured tips.

SYN. Byſſus barbata. *Hudſ.* 606. *Hull.* 308.
B. fulva. *With. v.* 4. 144. *t.* 18. *f.* 5.
B. arborea barbata, fulvi coloris. *Dill. Muſc.* 9. *t.* 1. *f.* 19. *Raii Syn.* 57.

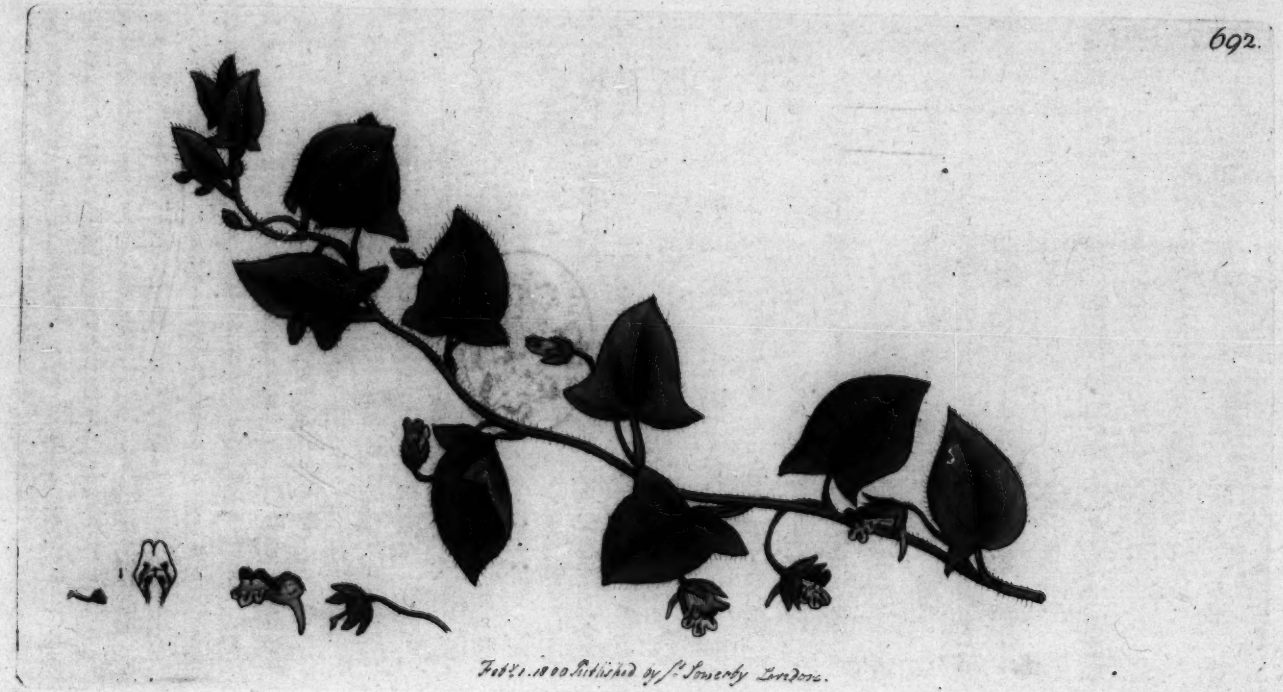
DR. WITHERING has accidentally referred this production to the *Byſſus fulva* of Hudſon inſtead of his *barbata*; hence there is ſome confuſion in his account of it. We have been favoured by the Right Hon. Lady Elizabeth Noel with a fine ſpecimen, accompanied by an excellent drawing of her own, in which the ſwellings at the ends of the branches are more complete than in any we have before ſeen; and her ladyſhip ſuppoſes, with great probability, the fructification may in ſome mode or other be contained in them. If ſo, it is the firſt approach towards the diſcovery of the fructification in this genus. Theſe tips are ſmooth, of the rich colour of the ſtigma of the *Crocus ſativus*, and ſemitranſparent; we have ſought in vain for any granules or ſeeds, but Dr. Withering perhaps had a more advanced ſpecimen.

The B. *barbata* grows on decayed wood in ſhady places, as court-yards, &c. It forms thick tawny-coloured tufts, from one to two inches high, and is perennial, the growth of each year being marked by a ſwelling and a darker colour in each principal filament or ſtem. Young plants conſiſt of a ſimple filament, regularly and beautifully feathered at the ſummit.

ANTIRRHINUM Elatine. ♃ ℞

*Sharp-pointed Flax-like.*





Feb.1.1800.Published by J.Sowerby London.

# ANTIRRHINUM Elatine.

*Sharp-pointed Fluellin.*

---

*DIDYNAMIA Angioſpermia.*

GEN. CHAR. *Cal.* in 5 ſegments. *Cor.* with a prominence at its baſe, pointing downwards and bearing honey. *Capſ.* 2-celled.

SPEC. CHAR. Leaves halberd-ſhaped, alternate. Stems procumbent.

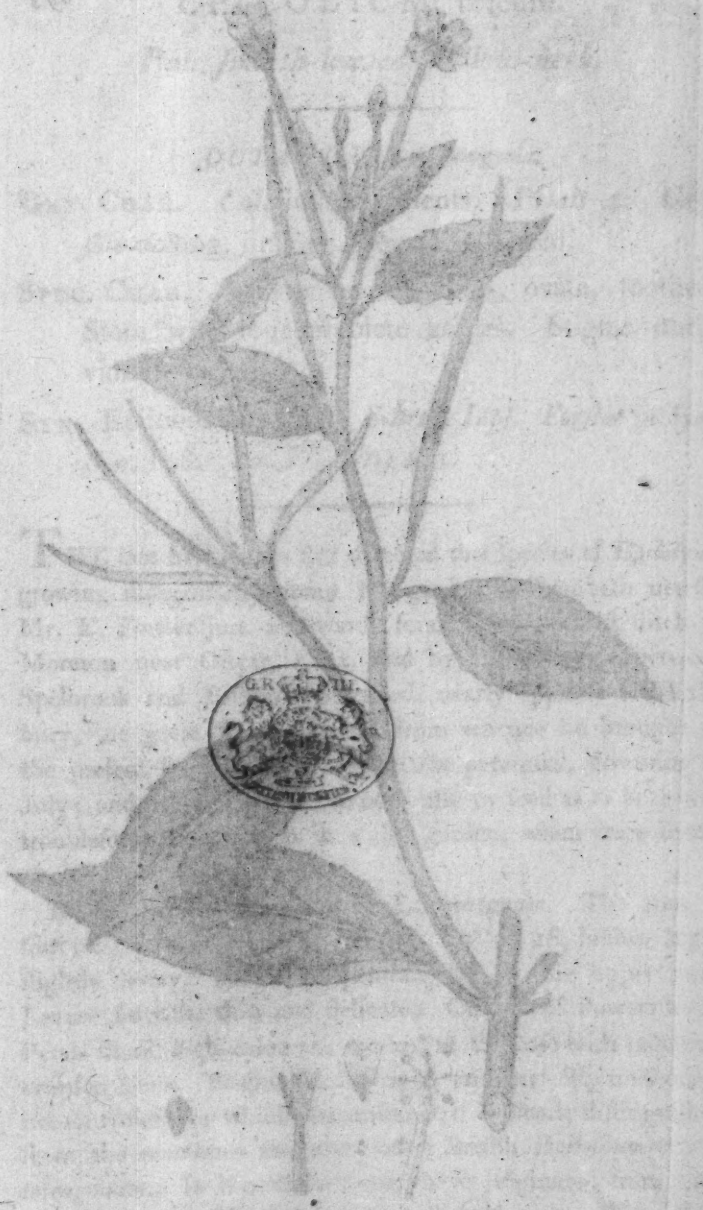
SYN. Antirrhinum Elatine. *Linn. Sp. Pl.* 851. *Sm. Fl. Brit.* 658. *Hudſ.* 271. *With.* 549. *Hull.* 138. *Relh.* 242. *Sibth.* 195. *Abbot.* 137. *Curt. Lond. faſc.* 1. *t.* 46.

Linaria Elatine dicta folio acuminato. *Raii Syn.* *282.

---

FOUND with the preceding at Shepey by Mr. Sowerby. It is more common than that in corn-fields on a gravelly or calcareous ſoil, flowering from July to September.

Root annual. Stems and general habit much the ſame as in A. *ſpurium*, except that this is in all reſpects a more ſlender plant, and the flowers are ſmaller. The halberd-ſhaped leaves eſſentially diſtinguiſh it, though the lower ones approach to a roundiſh form. Flower-ſtalks capillary, and moſtly ſmooth. Segments of the calyx approaching to lanceolate. Corolla yellow with a violet upper lip. Seeds very rugged, as in A. *Cymbalaria*. This ſpecies alſo has occaſionally regular flowers. The abortive fifth ſtamen appears to be conſtant, and ſhews, among many other circumſtances, the cloſe affinity between the Order in Linnæus to which theſe plants belong, and the *Pentandria Monogynia*.





Feb 1. 1800 Published by J. Sowerby London.

# EPILOBIUM roſeum.

## *Pale ſmooth-leaved Willow-herb.*

*OCTANDRIA Monogynia.*

GEN. CHAR. *Cal.* in 4 ſegments. *Petals* 4. *Capſule* oblong, inferior. *Seeds* feathered.

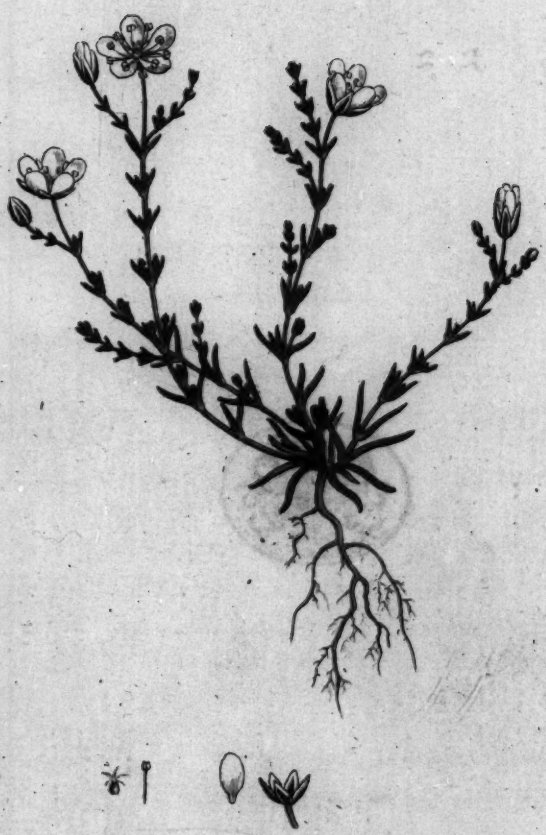
SPEC. CHAR. Leaves on footſtalks, ovate, toothed. Stem with four obſolete angles. Stigma undivided.

SYN. Epilobium roſeum. *Schreb. Lipſ. Forſter in Sym. Syn.* 198. *Sm. Fl. Brit.* 411.

THE late Mr. Curtis firſt detected this ſpecies of *Epilobium* growing indigenouſly about his garden in Lambeth marſh. Mr. E. Forſter jun. afterwards found it in a moiſt ditch at Moreton near Ongar, Eſſex, and by the road-ſide between Spelbrook and Biſhop's Stortford, nearly oppoſite to Wallbury, the great Roman camp, from whence he brought us the preſent ſpecimen. It ſeems to be perennial, flowering in July; and propagates itſelf ſo copiouſly by ſeed as to be a very troubleſome weed, even in a dry garden, when once introduced.

It has much the habit of E. *montanum*. The root is fibrous. Stem upright, branched, 12 or 18 inches high, ſlightly hoary, obſcurely quadrangular in the upper part. Leaves ſmooth, thin and delicate. Cluſters of flowers leafy. Petals ſmall, fleſh-coloured, marked at the baſe with radiating crimſon lines. Stigma club-ſhaped and perfectly undivided, not four-cleft; by which circumſtance it is clearly diſtinguiſhed from the *montanum* and every other Britiſh *Epilobium* except *tetragonum*. Is it poſſible it may have originated from ſeeds of the latter impregnated by the pollen of *montanum*? If ſo, it unites the external form of the father with the fructification or internal ſtructure of the mother, according to the Linnæan hypotheſis, as completely as could be wiſhed.


G.R.
III.



Feb.1.1800 Published by J. Sowerby, London.

# SPERGULA nodoſa.

## *Knotted Spurrey.*

*DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5, undivided. *Capſule* ſuperior, ovate, of 1 cell and 5 valves.

SPEC. CHAR. Leaves oppoſite, awl-ſhaped, ſmooth; the upper ones cluſtered. Calyx without nerves.

SYN. Spergula nodoſa. *Linn. Sp. Pl.* 630. *Sm. Fl. Brit.* 503. *Hudſ.* 203. *With.* 437. *Hull.* 102. *Relh.* 181. *Sibth.* 148. *Abbot.* 103. *Curt. Lond. faſc.* 4. *t.* 34.

Alſine paluſtris foliis tenuiſſimis, ſeu Saxifraga paluſtris anglica. *Raii Syn.* 350.

THIS pretty plant is found in wet ſpots upon ſandy heaths and commons, but not very frequently. It is perennial, flowering in July and Auguſt. The ſeeds are not always perfected.

Root fibrous. Herb very ſmooth. Stems ſpreading, and generally proſtrate, numerous, ſlender, but little branched, clothed with many pairs of awl-ſhaped united leaves, which produce from their boſoms tufts of much ſmaller leaves, eſpecially the uppermoſt. Sometimes the larger ones are ſlightly fringed at their baſe. The flowers grow on ſtalks at or near the extremities of the ſtems, and are large in proportion to the plant, of a pure brilliant white, and elegant in their appearance. The 5 ſtyles and 5 valves of the fruit alone ſeparate this plant from the genus of *Arenaria*, to which it is in other reſpects cloſely allied, as may indeed be ſaid of almoſt every *Spergula*.

The firſt diſcoverer of the S. *nodoſa* in England was Mr. John Goodyer in 1626, as appears from his own ſtatement in the 2d edition of Gerarde's Herbal, *p.* 568; to which work he was a great contributor, and his communications are remarkable for accuracy of obſervation and clearneſs of expreſſion.





J.e & F. 1800 Published by Js. Sowerby London.

# SEDUM reflexum.

## *Yellow Stone-crop.*

*DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectariferous ſcales at the baſe of the germen. *Capſules* 5.

SPEC. CHAR. Leaves awl-ſhaped, ſcattered, looſened at the baſe; the lowermoſt recurved. Flowers ſomewhat cymoſe.

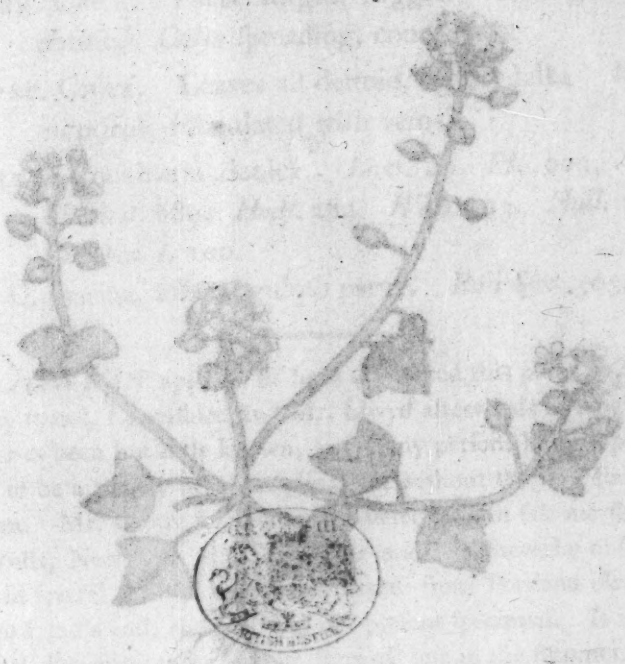
SYN. Sedum reflexum. *Linn. Sp. Pl.* 618. *Sm. Fl. Brit.* 490. *Hudſ.* 195. *With.* 429. *Hull.* 100. *Relh.* 173. *Sibth.* 144. *Abbot.* 99.

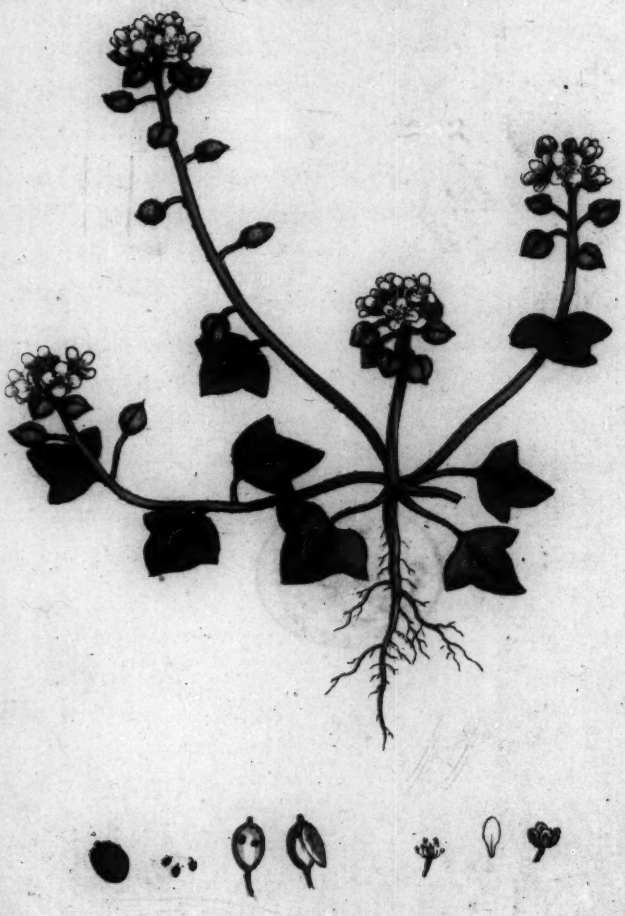
S. minus, luteum, ramulis reflexis. *Raii Syn.* 270. and

S. minus hæmatoides. *Raii Syn.* 269.

COMMON on walls and thatched roofs, flowering in July. The roots are perennial, conſiſting of ſimple fibres that ſpring from the lower parts of the round, fleſhy, variouſly ſpreading, entangled or pendent, ſtems. The leaves are irregularly but not diſtantly placed on the branches and upright flowering ſtems, and are extremely ſucculent, ſmooth, rather glaucous, often reddiſh, of an awl-ſhaped figure, attached by their flat inner-ſide a little above the baſe, ſo that they terminate below in a kind of ſhort ſpur. When old, they eaſily fall off. Flowers in a terminal cyme, bright yellow, numerous, very generally conſiſting of 6 petals and germens, with as many ſegments of the calyx, and 12 ſtamina, having (as Linnæus expreſſes it) a fifth part added to the natural number in the fructification; a circumſtance common in the natural order to which *Sedum* belongs.

Ray notices two kinds of this Stonecrop, differing only in the branches and flower-ſtalks being more or leſs recurved, and indeed he himſelf thought them only varieties.





Feb.ʸ 1. 1800 Published by Jᵃ Sowerby, London.

# COCHLEARIA danica.

*Daniſh Scurvy-graſs.*

*TETRADYNAMIA Siliculoſa.*

GEN. CHAR. *Pouch* turgid, rugged; valves gibbous, obtuſe. *Calyx* ſpreading, concave.

SPEC. CHAR. Leaves all deltoid, on footſtalks. Fruit elliptical, reticulated with veins.

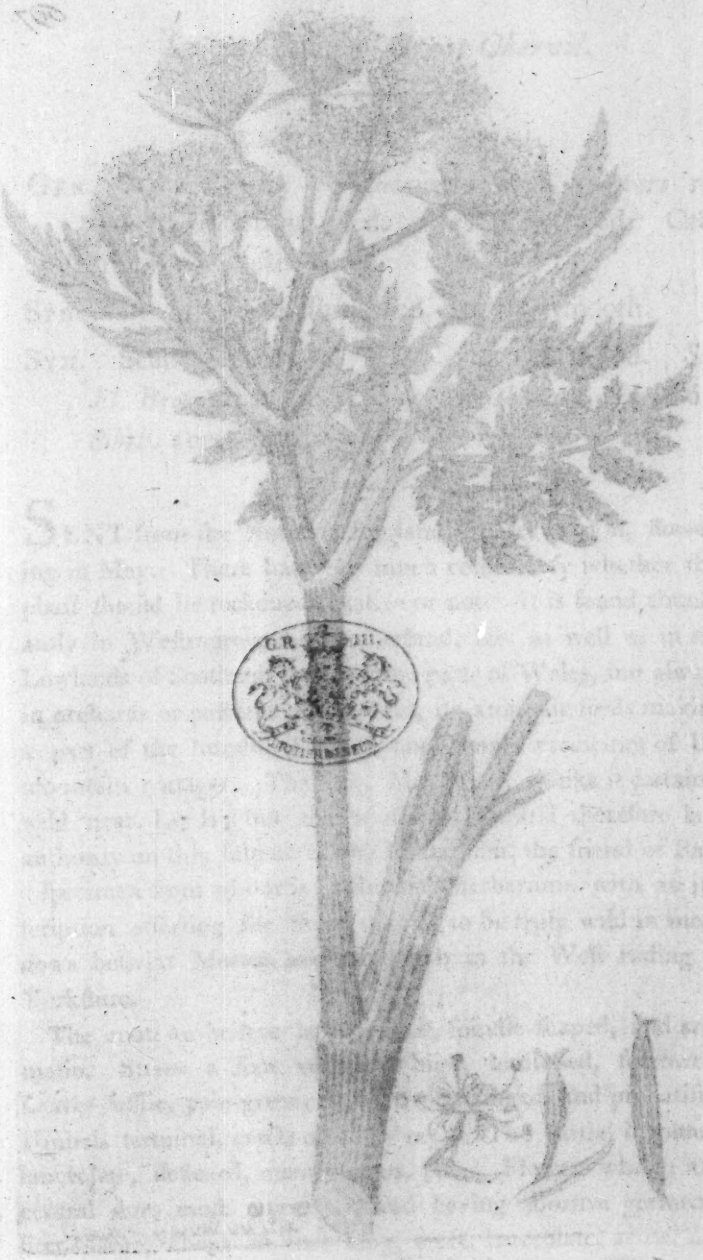
SYN. Cochlearia danica. *Linn. Sp. Pl.* 903. *Sm. Fl. Brit.* 689. *Hudſ.* 284. *With.* 573. *Hull.* 144. *Fl. Dan. t.* 100.

C. marina, folio anguloſo parvo. *Raii Syn.* 303.

LAWSON appears to have diſcovered this plant in Walney iſland, Lancaſhire, and Mr. Llwyd afterwards in Angleſea. It has been but little known, and many perſons have ſuſpected it to be a variety of C. *anglica*, but without the leaſt foundation. Mr. Crowe ſome years ago detected it in ſalt marſhes at Wells, Norfolk. Mr. D. Turner and Mr. Sowerby obſerved it in ſeveral parts of the ſouthern coaſt from Portland iſland to the Land's end, and gathered our preſent ſpecimen. It is annual, flowering from May or June till late in the ſummer.

This ſpecies is always ſmaller than thoſe figured in *t.* 551 and 552, though like them it varies in ſize. The root is fibrous. Stems ſpreading, about four inches high, moſtly ſimple. Leaves all on longer or ſhorter footſtalks, uniform, deltoid or trowel-ſhaped, with three (rarely five) lobes, ſmooth and ſhining, having much of an ivy-like appearance, ſo that Lobel aptly called it *Thlaſpi hederaceum*. The flowers are ſmall and white, in a corymbus which is ſeldom ſo much elongated as in the other ſpecies. Pouches elliptical, flattiſh, marked with a net-work of veins, and crowned with a ſhort ſtyle. Seeds about 6 in each cell, rugoſe.

If the ivy-like form of the leaves, eſpecially the radical ones, be attended to, this ſpecies can never be miſtaken. In ſenſible qualities it agrees with the reſt of its tribe.


G.R. III.



Feb.y 1. 1800 Published by J.s Sowerby.

# SCANDIX odorata.

*Sweet Cicely. Great Chervil.*

*PENTANDRIA Digynia.*

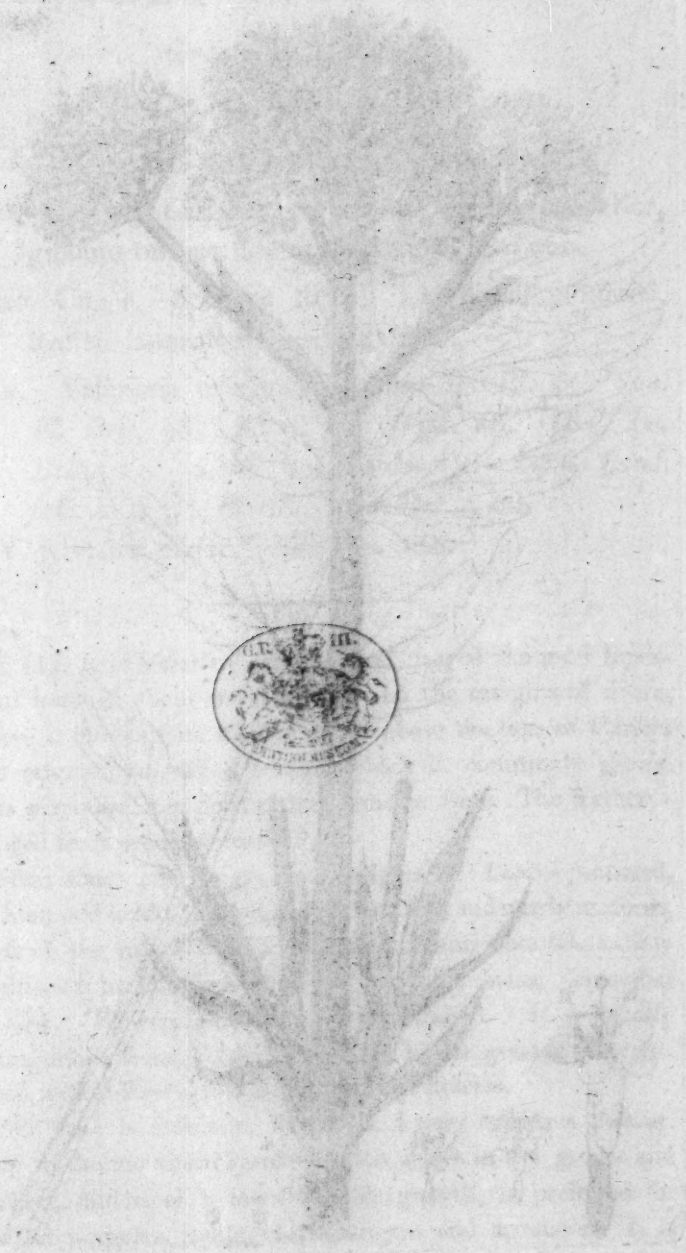
GEN. CHAR. *Gen. Involucrum* none. *Flowers* radiant. *Petals* notched. *Fruit* awl-ſhaped. Central *flowers* often male.

SPEC. CHAR. Seeds furrowed, angular, ſmooth.

SYN. Scandix odorata. *Linn. Sp. Pl.* 368. *Sm. Fl. Brit.* 323. *Hudſ.* 124. *With.* 306. *Hull.* 63. *Sibth.* 100. *Lightf.* 166.

SENT from the North of England by Mr. Robſon, flowering in May. There has been much controverſy whether this plant ſhould be reckoned a native or not. It is found abundantly in Weſtmoreland, Cumberland, &c. as well as in the Lowlands of Scotland, and in ſome parts of Wales, but always in orchards or paſtures near houſes, its aromatic ſeeds making a part of the humble luxuries and ſimple medicines of the mountain cottager. The Rev. Mr. Wood thinks it certainly wild near Leeds; but the moſt ancient and therefore beſt authority on this ſubject is Dr. Richardſon, the friend of Ray, a ſpecimen from whom is in Buddle's herbarium, with an inſcription aſſerting the Sweet Cicely to be truly wild in meadows betwixt Morton and Ruſhforth in the Weſt Riding of Yorkſhire.

The root we believe is perennial, ſpindle-ſhaped, and aromatic. Stems a foot and half high, branched, furrowed. Leaves ſeſſile, pale-green, hairy, triply winged, and pinnatifid. Umbels terminal, erect, of many rays. The partial involucra lanceolate, deflexed, membranous, pale. Flowers white; the central ones moſt numerous, and having abortive germens. Seeds large, about an inch long, erect, lanceolate, acute, not beaked, furrowed, ſmooth, of a ſhining brown, with a ſweet aromatic flavour, and crowned by the ſpreading ſtyles.





July 1, 1810 Published by J. Sowerby.

# VALERIANA officinalis.

## *Great Wild Valerian.*

*TRIANDRIA Monogynia.*

GEN. CHAR. *Cal.* none. *Cor.* of one petal, ſuperior, gibbous on one ſide at the baſe. *Seed* one.

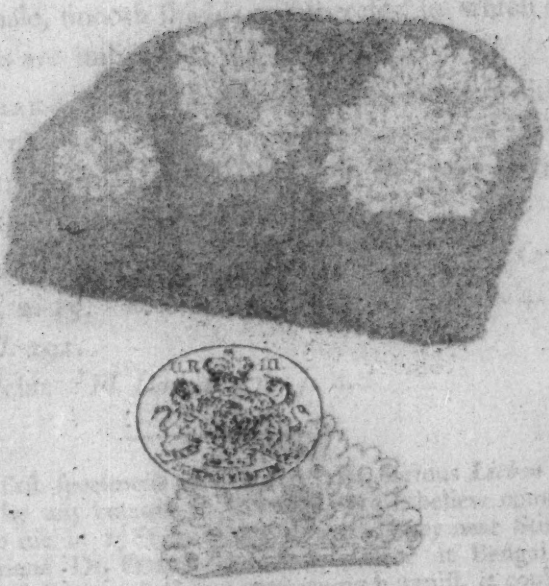
SPEC. CHAR. Stamina three. Leaves all pinnated, leaflets lanceolate, nearly uniform.

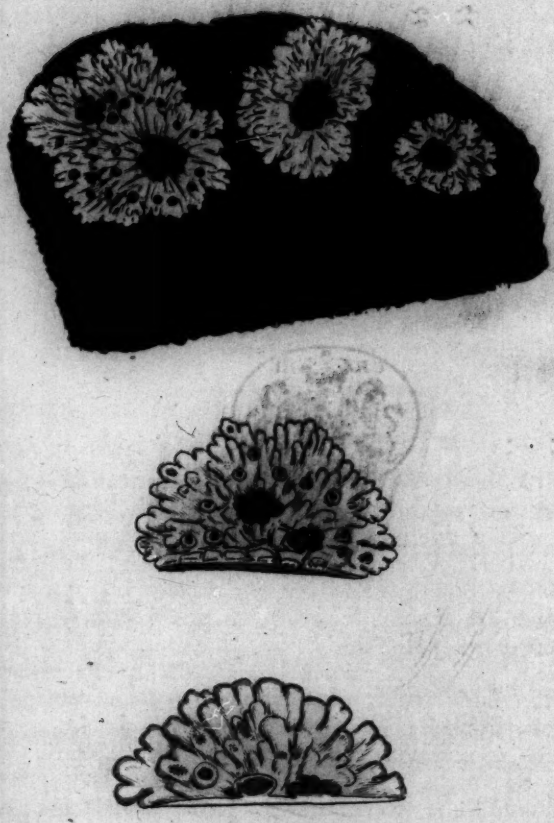
SYN. Valeriana officinalis. *Linn. Sp. Pl.* 45. *Sm. Fl. Brit.* 38. *Hudſ.* 12. *With.* 66. *Hull.* 10. *Relh.* 14. *Sibth.* 21. *Abbot.* 8. *Curt. Lond. faſc.* 6. *t.* 3. *Woodv. Med. Bot. t.* 96.
V. ſylveſtris major. *Raii Syn.* 200.

THE wild Valerian cannot have eſcaped the moſt ſuperficial botaniſt about moiſt hedges and the margins of rivers, where it lifts up its flowery heads above the tops of Carices and other large graſſes, among which it commonly grows. It is perennial, and flowers ſome time in June. The feathery-winged ſeeds are ſcattered in July.

Stem about 4 feet high, furrowed, leafy. Leaves pinnated, with an odd leaflet, all the leaflets ſerrated, and nearly uniform, thoſe of the radical leaves (eſpecially in the mountain variety mentioned by Dillenius in Ray's Synopſis) being ſomewhat broader. Flowers numerous, fleſh-coloured. It is readily diſtinguiſhed from V. *dioica*, *t.* 628, by its greater ſize, pinnated radical leaves, and hermaphrodite flowers.

The root is aromatic, but with a very nauſeous flavour. That of the mountain variety, which grows in dry groves and thickets, and is of a more humble growth, is preferred for medical purpoſes, being more pungent and aromatic. It is celebrated, not unjuſtly, in nervous diſeaſes, particularly hyſteric and epileptic complaints.


G.R. III.



Sept. 1800 Published by J. Sowerby London.

# LICHEN gelidus.

*Fleſh-coloured Alpine Lichen.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. Male, ſcattered warts.
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

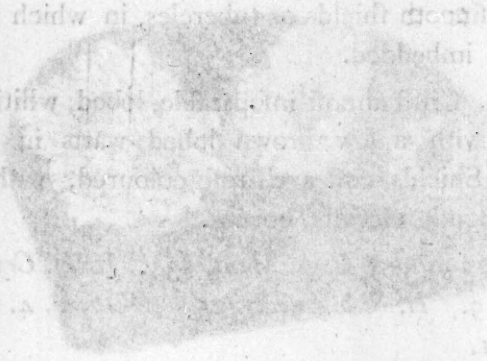
SPEC. CHAR. Cruſt almoſt inſeparable, lobed, whitiſh, ſmooth, with a few brown lobed warts in the centre. Shields concave, roſe-coloured, with a white, ſmooth, elevated border.

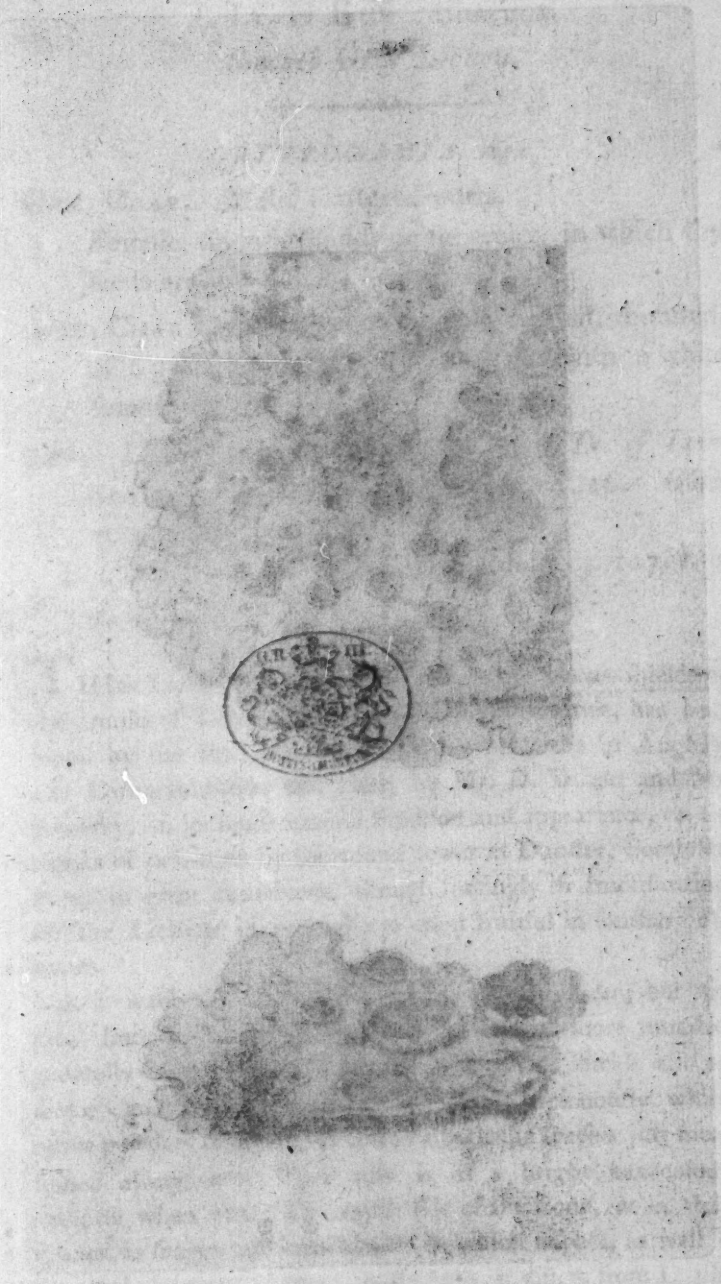
SYN. Lichen gelidus. *Linn. Mant.* 133. *Dickſ. Crypt. faſc.* 2. 19. *H. Sicc. faſc.* 7. 25. *With. v.* 4. 26. *Hull.* 291.

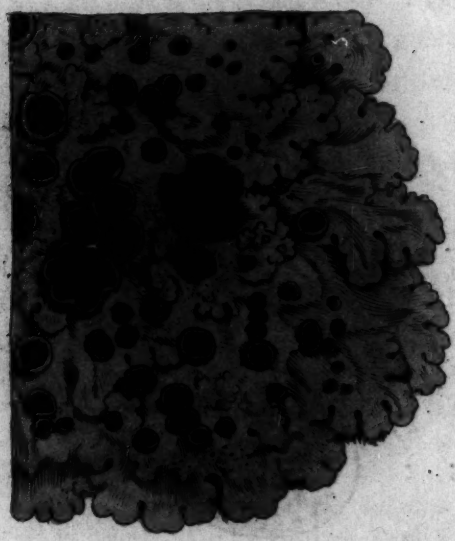
L. Heclæ. *Fl. Dan. t.* 470. *f.* 2.

THE firſt ſpecimens of this rare and curious *Lichen* ever obſerved by any botaniſt in Britain, were I believe communicated to me in 1782 from the Glen of Leney near Stirling by my friend Dr. Francis Buchannan, now at Bengal. I was perſuaded, though then a very young botaniſt, it could be no other than the L. *gelidus* of Linn. and ventured to contend, againſt many higher authorities, that the *gelidus* of Hudſon was only *ventoſus* bleached by age. Linnæus evidently deſcribes the ſingular brown tubercles in the centre as the fructification, inſtead of the real ſhields, which are of very rare occurrence, and were not in the ſpecimens he ſaw. The Rev. Mr. Harriman and Mr. Oliver have been ſo fortunate as to find ſome in perfection, growing on large ſtones near the High Force, Teeſdale, and obligingly communicated them to Mr. Sowerby.

This ſpecies can be confounded with no other. It conſiſts of a white ſmooth cruſt, with difficulty to be cut whole from the rock even in wet weather, and forming ſmall roundiſh patches, lobed in the margin, and partly aſſuming the appearance of an imbricated *Lichen*. In the centre are a few elevated, brown, lobed warts, whoſe uſe and functions are unknown; and around them, in perfect plants, ſeveral ſmall round ſhields, of a delicate roſe-colour when wet, with a very white ſmooth elevated margin.









Marchmont Published by J.s Stanesby Junr.

# LICHEN tiliaceus.

*Smooth Grey Lichen.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. Male, ſcattered warts.

Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Imbricated. Leaflets ſinuated, rounded, of a greyiſh white. Shields brown, with a white ſmooth margin.

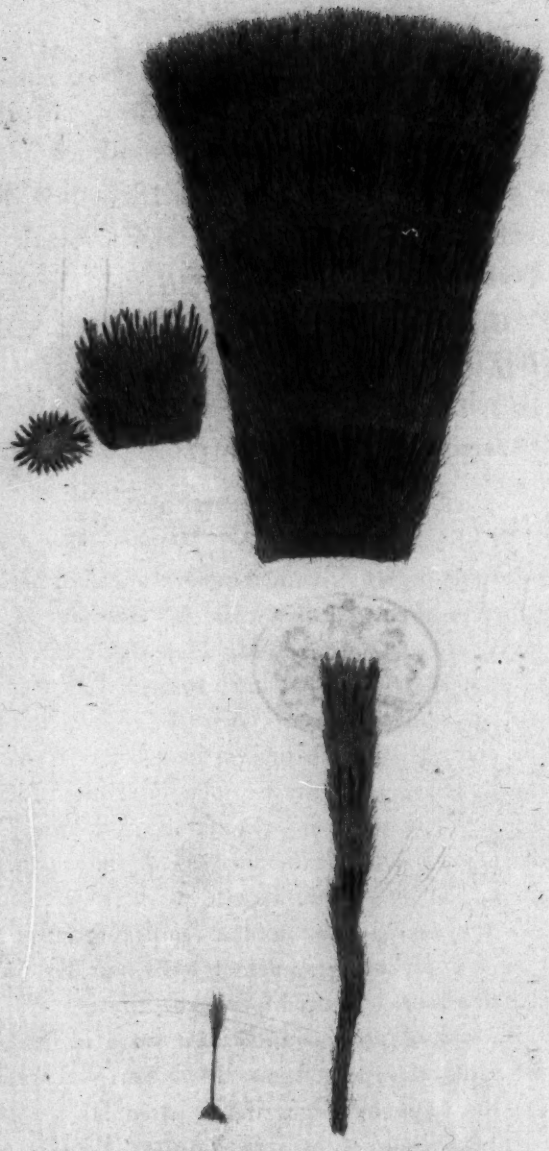
SYN. Lichen tiliaceus. *(Hoffm.) Sm. Tr. of Linn. Soc. v.* 1. 83. *Dickſ. Crypt. faſc.* 3. 16. *With. v.* 4. 31. *Hull.* 294.

L. quercifolius. *Wulf. in Jacq. Coll. v.* 3. 127. *t.* 9. *f.* 2.

THIS *Lichen*, very common and with copious ſhields on the trunks of Olive-trees in the South of France, has been found by the Rev. Mr. Hugh Davies on rocks in Angleſea and Carnarvonſhire; and lately by Mr. D. Turner and Mr. Sowerby, in its more natural ſituation and appearance, on the trunks of oak-trees by the round tower at Dunſter, Somerſetſhire, in great abundance, though ſparingly in fructification, for the Lichens in general are moſt fruitful in ſouthern climates.

It is moſt allied to L. *ſaxatilis* and *omphalodes*; but the great ſmoothneſs of its upper ſurface, and its more rounded, generally broader, lobes, diſtinguiſh it. The ſhields alſo are flatter, and their margin ſmooth and conſpicuouſly white, never powdery or warty, as thoſe of both the ſpecies juſt mentioned always are. Their diſk is of a bright bay-colour, greeniſh when wet. The under ſide of the frond, as in thoſe ſpecies, is ſhaggy and coal-black; in which reſpect, as well as ſize, and the want of green moſſy balls, it differs from L. *glomuliferus* figured in our 5th vol. *t.* 293, with which the ingenious Abbé Wulfen confounded it.





Feb.1.1800. Published by J. Sowerby, London.

# BYSSUS barbata.

## *Bearded Yellow Byſſus.*

*CRYPTOGAMIA Algæ.*

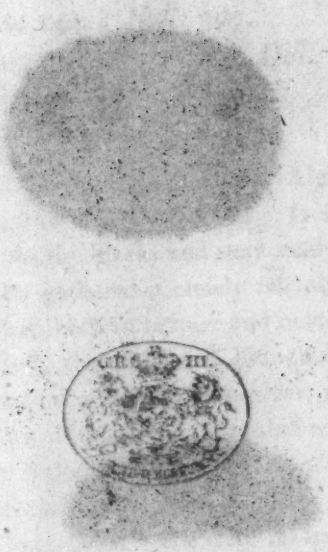
GEN. CHAR. Whole plant conſiſting of down or ſimple powder. *Fructification* unknown.

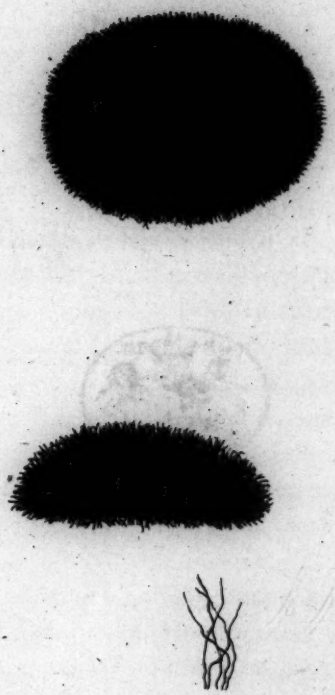
SPEC. CHAR. Filaments upright, branched, bundled, with annual interruptions, tawny, with ſmooth, ſwelled, deeper-coloured tips.

SYN. Byſſus barbata. *Hudſ.* 606. *Hull.* 308.
B. fulva. *With. v.* 4. 144. *t.* 18. *f.* 5.
B. arborea barbata, fulvi coloris. *Dill. Muſc.* 9. *t.* 1. *f.* 19. *Raii Syn.* 57.

DR. WITHERING has accidentally referred this production to the *Byſſus fulva* of Hudſon inſtead of his *barbata*; hence there is ſome confuſion in his account of it. We have been favoured by the Right Hon. Lady Elizabeth Noel with a fine ſpecimen, accompanied by an excellent drawing of her own, in which the ſwellings at the ends of the branches are more complete than in any we have before ſeen; and her ladyſhip ſuppoſes, with great probability, the fructification may in ſome mode or other be contained in them. If ſo, it is the firſt approach towards the diſcovery of the fructification in this genus. Theſe tips are ſmooth, of the rich colour of the ſtigma of the *Crocus ſativus*, and ſemitranſparent; we have ſought in vain for any granules or ſeeds, but Dr. Withering perhaps had a more advanced ſpecimen.

The B. *barbata* grows on decayed wood in ſhady places, as court-yards, &c. It forms thick tawny-coloured tufts, from one to two inches high, and is perennial, the growth of each year being marked by a ſwelling and a darker colour in each principal filament or ſtem. Young plants conſiſt of a ſimple filament, regularly and beautifully feathered at the ſummit.





Feb 1. 1800 Published by J. Sowerby London.

# BYSSUS nigra.

## *Black Rock Byſſus.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. Whole plant conſiſting of down or ſimple powder. *Fructification* unknown.

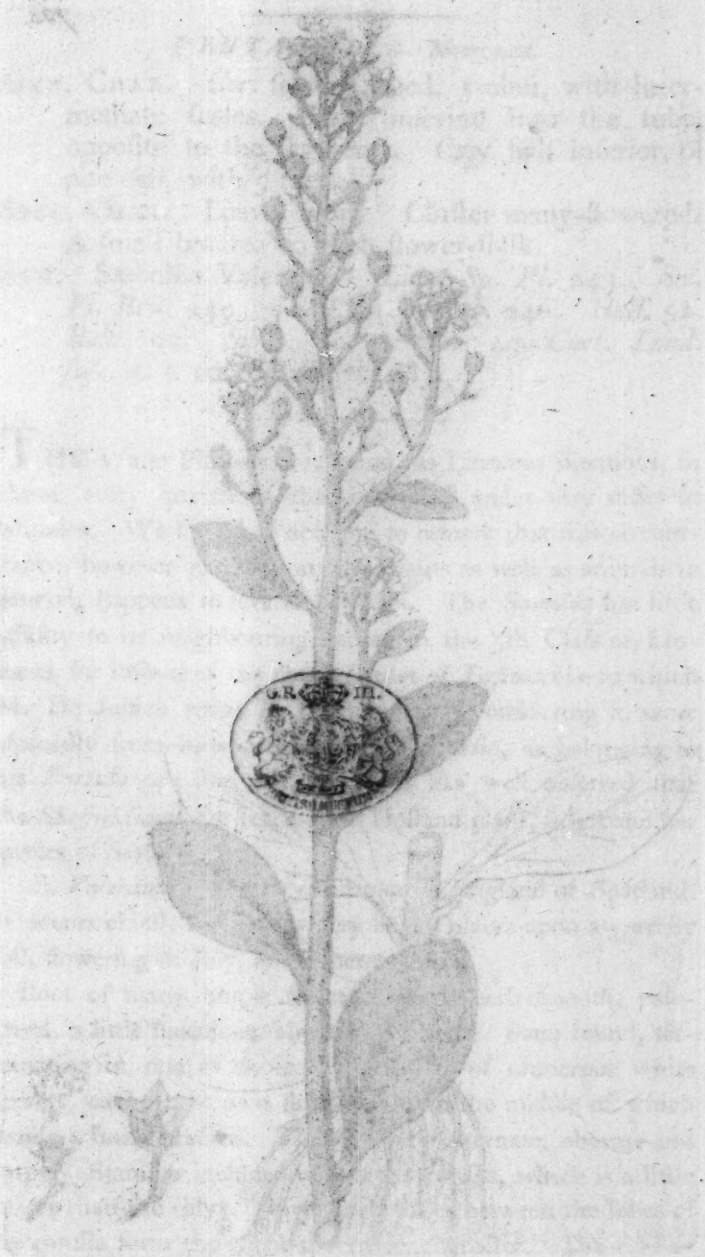
SPEC. CHAR. Filaments branched, matted, powdery, black.

SYN. Byſſus nigra. *Hudſ.* 606. *Lightf.* 1003. *With. v.* 4. 144. *Hull.* 307.

B. petræa nigerrima fibroſa. *Dill. Muſc.* 9. *t.* 1. *f.* 18. *Dill. in Raii Syn.* 57.

ON ſhady overhanging rocks in the Alpine parts of our iſland this *Byſſus* is often met with. It forms patches of various ſizes, perfectly black, and may eaſily be ſcraped from the ſtone. When gathered it cloſely reſembles a piece of felt ſcraped from a hat, both in texture and colour. It conſiſts of a mat of fine, ſoft, though elaſtic, branched filaments, often covered with an equally black ſooty powder, which is probably the ſeed. Yet we do not know that this powder is produced at any particular ſeaſon excluſively. The plant appears to be perennial, and, from ſome remarks we have made in its place of growth, very long-lived. We have no ſpecimens to decide accurately what Linnæus intended by his B. *antiquitatis*, but we can ſcarcely aſſent to Lightfoot's ſuppoſition, that he originally meant our *nigra*, though he, or Murray, in *Syſt. Veg. ed.* 13, has quoted the figure of Dillenius and deſcription of Weis which belong to it. Lightfoot's account is taken, with a little variation, from the author laſt mentioned.

Mr. Sowerby found this plant on ſand-ſtone rocks, near Tunbridge, in plenty. I have gathered it on the Pentland hills near Edinburgh, and about Winandermere, Weſtmoreland; but no where in ſuch perfection as at Hafod, Cardiganſhire, on a ſhady rock oppoſite the great ſtone of Maen Arthur, one of the wildeſt and moſt romantic ſpots in Wales. It is always found on a micaceous or quartzoſe ſtone.


G.R. III.



# SAMOLUS Valerandi.

## *Brook-weed, or Water Pimpernel.*

*PENTANDRIA Monogynia.*

GEN. CHAR. *Cor.* ſalver-ſhaped, 5-cleft, with intermediate ſcales. *Stam.* inſerted into the tube, oppoſite to the ſegments. *Capſ.* half inferior, of one cell, with 5 teeth.

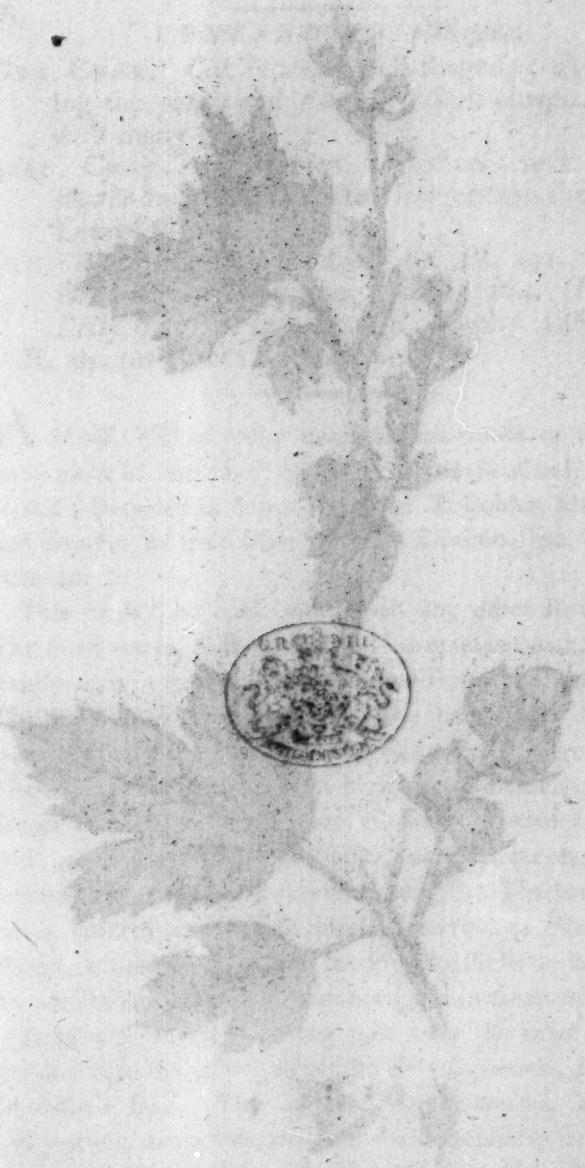
SPEC. CHAR. Leaves blunt. Cluſter many-flowered. A ſmall bractea on each flower-ſtalk.

SYN. Samolus Valerandi. *Linn. Sp. Pl.* 243. *Sm. Fl. Brit.* 259. *Hudſ.* 94. *With.* 246. *Hull.* 52. *Relh.* 92. *Sibth.* 79. *Abbot.* 49. *Curt. Lond. faſc.* 4. *t.* 20. *Raii Syn.* 283.

THE Water Pimpernel is found, as Linnæus mentions, in almoſt every quarter of the globe and under very different latitudes. We have had occaſion to remark that this circumſtance, however uncommon with plants as well as animals in general, happens to ſeveral aquatics. The *Samolus* has little affinity to its neighbouring genera in the 5th Claſs of Linnæus, for inſtead of the natural order of *Lyſimachiæ* to which M. De Juſſieu refers it, I cannot help conſidering it, more eſpecially from its approximation to *Montia*, as belonging to his *Portulaceæ*; and Mr. Dryander has well obſerved that the *Sheffieldia* of Forſter, a New Holland plant, is but another ſpecies of *Samolus*.

S. *Valerandi* is not very common in England or Scotland. It occurs chiefly in clear watery boggy places upon a gravelly ſoil, flowering in July, and is perennial.

Root of many ſimple fibres. Whole herb ſmooth, pale-green, a little ſucculent, about a foot high. Stem round, terminating in one or more long cluſters of numerous white flowers, each on its own flower-ſtalk, in the middle of which ſtands a ſmall bractea. The leaves are alternate, obovate and entire. Stamina included within the corolla, which is a little longer than the calyx. Five ſmall ſcales between the lobes of the corolla form the eſſential generic character. The capſule is rather more below than above the calyx, and opens with 5 teeth at the top.





March 1. 1808 Published by J.t Sowerby London.

# RIBES alpinum.

## *Taſteleſs Mountain Currants.*

*PENTANDRIA Monogynia.*

GEN. CHAR. *Cal.* ſuperior, bell-ſhaped, 5-cleft, bearing the *petals* and *ſtamina*. *Style* cloven. *Berry* with many ſeeds.

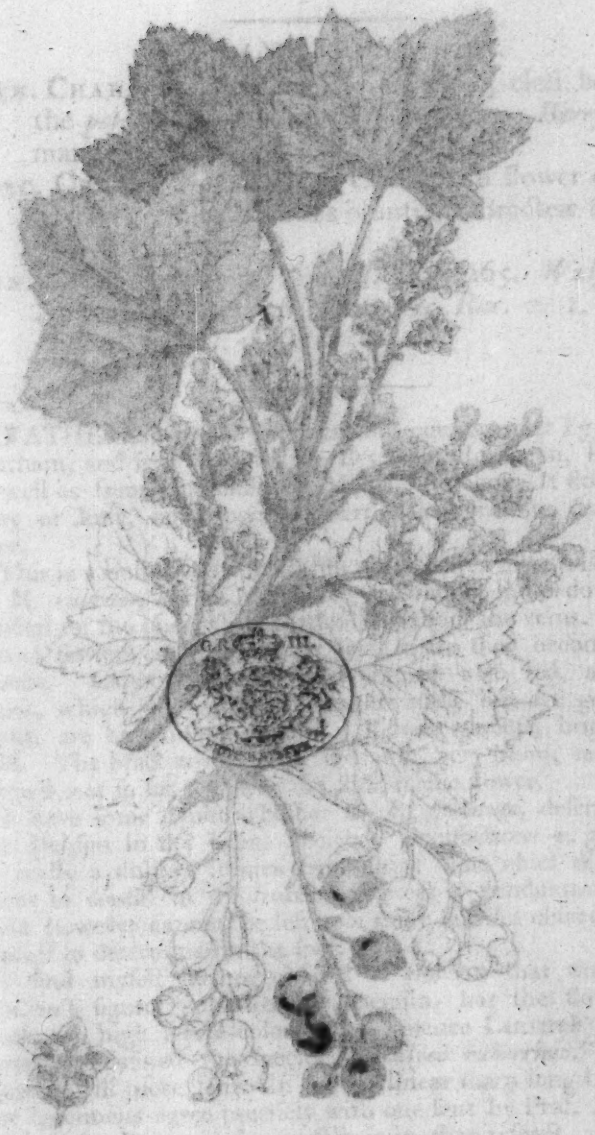
SPEC. CHAR. No thorns. Cluſters erect both in flower and fruit. Bracteæ longer than the flowers. Leaves ſhining beneath.

SYN. Ribes alpinum. *Linn. Sp. Pl.* 291. *Sm. Fl. Brit.* 264. *Hudſ.* 99. *With.* 264. *Hull.* 54. *Dickſ. H. Sicc. faſc.* 15. 13. *Lightf.* 146.
R. alpinus dulcis. *Raii Syn.* 456.

A NATIVE of rocky mountainous woods or thickets in ſome parts of the north of England and Scotland. We received a ſpecimen in flower from Mr. E. Robſon May 29 laſt, and another in fruit from Mr. W. Brunton, jun. of Ripon, June 20.

This cannot be confounded with any other Britiſh *Ribes*. The ſmall leaves, ſo ſmooth and ſhining underneath, the conſtantly upright ſpikes, and the inſipid fruit clearly aſcertain it. The berries, ſo far from having the ſharp acidity of our red currants, are filled with a mucilage as taſteleſs as gum arabic. The ſhrub is about 2 or 3 feet high, much branched, ſmooth, except that the leaf-ſtalks are ciliated. Flowers ſmall, of a dull green, with glandular ſtalks, and brown membranous bracteæ exceeding each flower in length. The bark in winter is covered with ſmall black *Sphæriæ*, or other minute *Fungi*, which Mr. Sowerby propoſes to illuſtrate hereafter in his admirable figures of that curious and intricate tribe.

It is well worth obſerving how truly the inſertion of the ſtamina into the calyx, as in the claſs *Icoſandria*, indicates a wholeſome fruit. The fruits of the *Pentandria Monogynia* are generally dangerous, many of them peculiarly fatal. *Ribes* is an exception, indicated by the inſertion of its ſtamina, in which, though not in their number, it accords with the *Icoſandria*. With this ſimple guide a traveller in the moſt unknown wilderneſs might eat in ſafety, and thus the natural tree of knowledge leads to life.


G. R. III.



March 1. 1800. Published by J. Sowerby London.

# RIBES petræum.
## *Rock Currants.*

*PENTANDRIA Monogynia.*

GEN. CHAR. *Cal.* ſuperior, bell-ſhaped, 5-cleft, bearing the *petals* and *ſtamina*. *Style* cloven. *Berry* with many ſeeds.

SPEC. CHAR. No thorns. Cluſters in flower erect; in fruit pendent. Petals bluntiſh. Bracteæ ſhorter than the flowers.

SYN. Ribes petræum. *Sm. Fl. Brit.* 265. *Wulfen. in Jacq. Miſc. v.* 2. 36. *Jacq. Ic. Rar. v.* 1. *t.* 49. *Wilden. Sp. Pl. v.* 1. 1153.

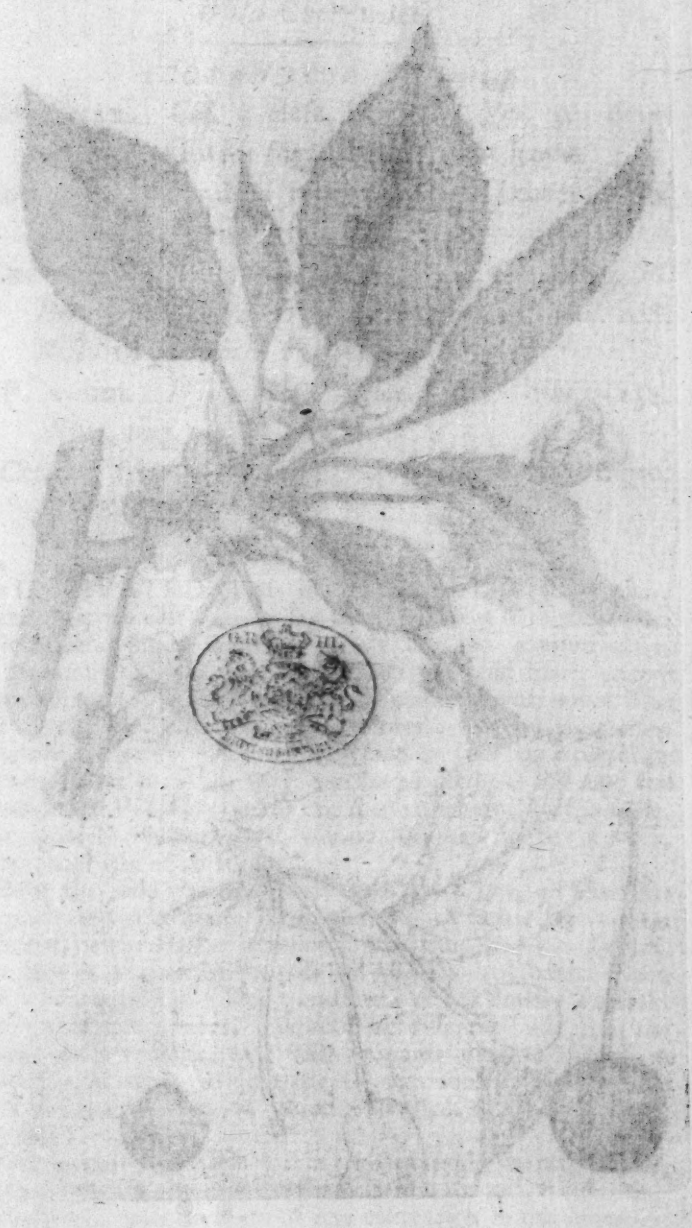
GATHERED in the mountainous country near Eggleſton, Durham, and ſent to us by the Rev. Mr. Harriman, F.L.S., as well as from Conſcliffe by Mr. E. Robſon. It flowers in May or June, and ripens its berries a month or ſix weeks later.

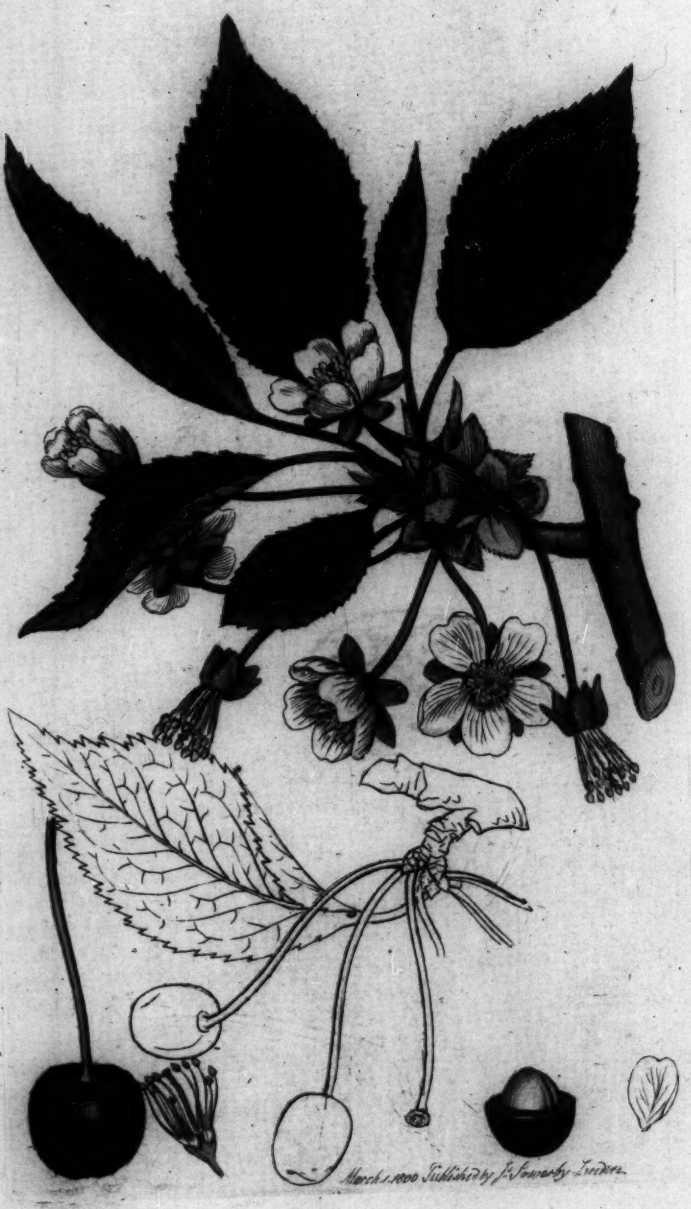
This is a buſhy branched ſhrub, with leaves not unlike thoſe of R. *rubrum*, except that they are rather more downy in general on the under ſide, particularly about the veins. Cluſters of flowers erect, but as the fruit ripens they become pendulous. Calyx greeniſh, often ſtained with red, and the petals, which vary in ſhape and breadth, but are generally blunt, are browniſh or reddiſh. Berries globoſe, bright red, acid. The bracteæ are ſhort, roundiſh, very blunt, recurved, ciliated, not ſo long as even the ſtalk of the flower.

I have ſome doubt whether the R. *ſpicatum*, deſcribed by Mr. Robſon in the Linn. Society's Tranſactions *v.* 3. *t.* 21, be really a diſtinct ſpecies from this. The chief difference ſeems to conſiſt in the fruit being erect or pendulous. This point however cannot be left to a more faithful obſerver than himſelf to determine on the ſpot.

I find myſelf farther obliged to obſerve that the Abbé Wulfen's figure, publiſhed by Jacquin, has the flowers of much too high a roſe-colour, from whence Lamarck has incautiouſly defined the ſpecies "*calyce ruberrimo.*" This figure is ſtill more faulty in having linear ſharp long bracteæ. Our ſpecimens agree preciſely with one ſent by Prof. Jacquin himſelf, ſo there can be no fallacy in that reſpect. I make this remark merely for the ſake of truth, and with the higheſt eſteem for his venerable correſpondent, whatever may have been ſaid to the contrary by a german writer* of no authority, equally deficient in liberality and fidelity, whoſe name I ſcarcely know, and will not help to preſerve.

* In a review of Tr. of Linn. Soc. v. 2. p. 10.




March 1, 1800 Published by J. Sowerby London.

# PRUNUS Ceraſus.

## *Wild Cherry-tree.*

*ICOSANDRIA Monogynia.*

GEN. CHAR. *Cal.* 5-cleft, inferior. *Pet.* 5. *Stone* of the *drupa* with ſlightly prominent ſeams.

SPEC. CHAR. Umbels nearly ſeſſile. Leaves ovato-lanceolate, folded when young.

SYN. Prunus Ceraſus. *Linn. Sp. Pl.* 679. *Sm. Fl. Brit.* 526. *Hudſ.* 213. *With.* 455. *Hull.* 108. *Relh.* 189. *Sibth.* 155. *Abbot.* 107.

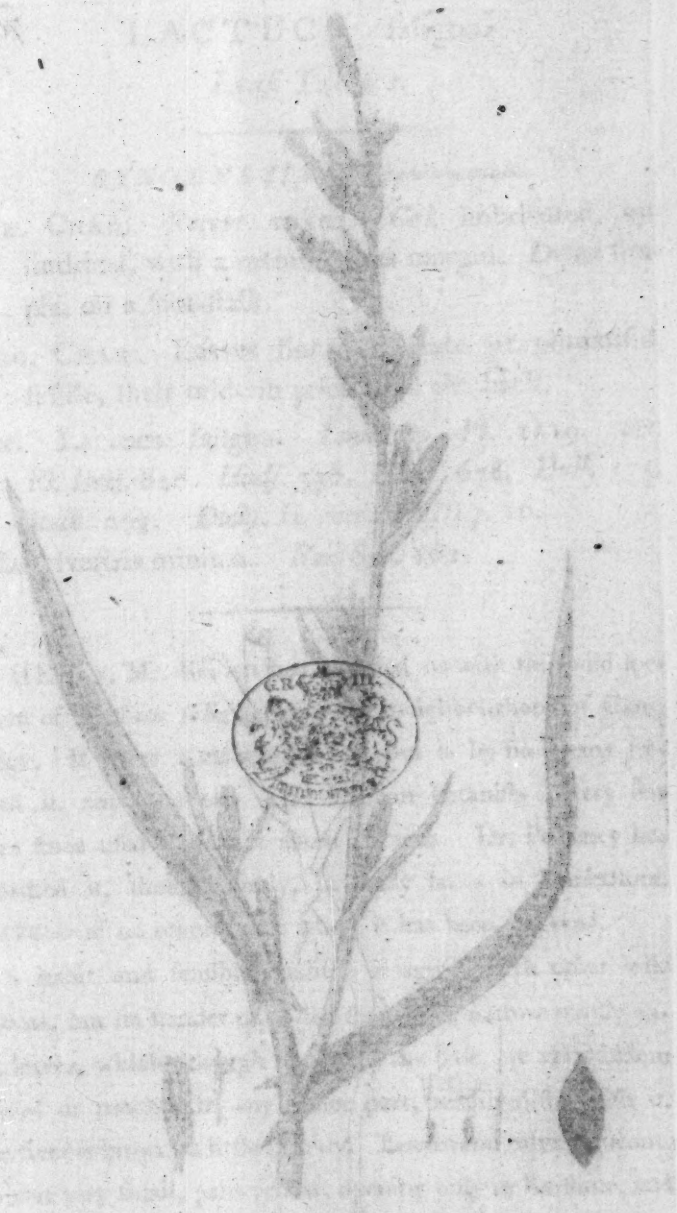
P. avium. *With.* 456. *Hull.* 108. *Sibth.* 154. *Abbot.* 107.

Ceraſus ſylveſtris fructu rubro, et fructu nigro. *Raii Syn.* 463.

CULTIVATED plants in general are liable to ſo many alterations, we can ſcarcely ſay when we meet with them in a truly natural ſtate, or which variety has the greateſt claim to originality. This is the caſe with the wild black cherry here delineated, and the ſtill more common red one. The firſt is the P. *avium* of Britiſh writers, but by no means certainly the *avium* of Linnæus, which he ſays has a red fruit. However that may be, there can be no doubt of this and the common red P. *Ceraſus* being one ſpecies, which, like the apple, pear, gooſeberry, &c. varies almoſt infinitely in the flavour, colour, and ſize of its fruit.

Both the wild cherries flower in May, when, as Linnæus elegantly expreſſes himſelf, Pomona, dreſſed in her ſnow-white garment, celebrates her nuptials. The fruit ripens in Auguſt. The tree is known by its poliſhed aſh-coloured bark. Each leaf when young is folded; and more or leſs downy beneath. Umbels of few flowers, produced by different buds from the leaves, always white, and with copious ſtamina not all in perfection at once, ſo that the impregnation leſs rarely fails than in ſome other fruits. Stipulæ toothed, glandular. Calyx reflexed.

This genus is no leſs ſtriking an example than the *Ribes*, *t.* 704, of the inſertion of the ſtamina into the calyx indicating a wholeſome fruit in ſpite of any other ſign to the contrary. Many of its ſpecies, as the *Padus* and *Lauro-ceraſus*, are in all their parts, except the pulpy fruit, as poiſonous as any vegetable we know. The fruit, though not always pleaſant or wholeſome, is never dangerous.





March 1, 1800 Published by W. Jones, Holborn, London.

# LACTUCA ſaligna.

## *Leaſt Lettuce.*

*SYNGENESIA Polygamia-æqualis.*

GEN. CHAR. *Recept.* naked. *Cal.* imbricated, cylindrical, with a membranous margin. *Down* ſimple, on a foot-ſtalk.

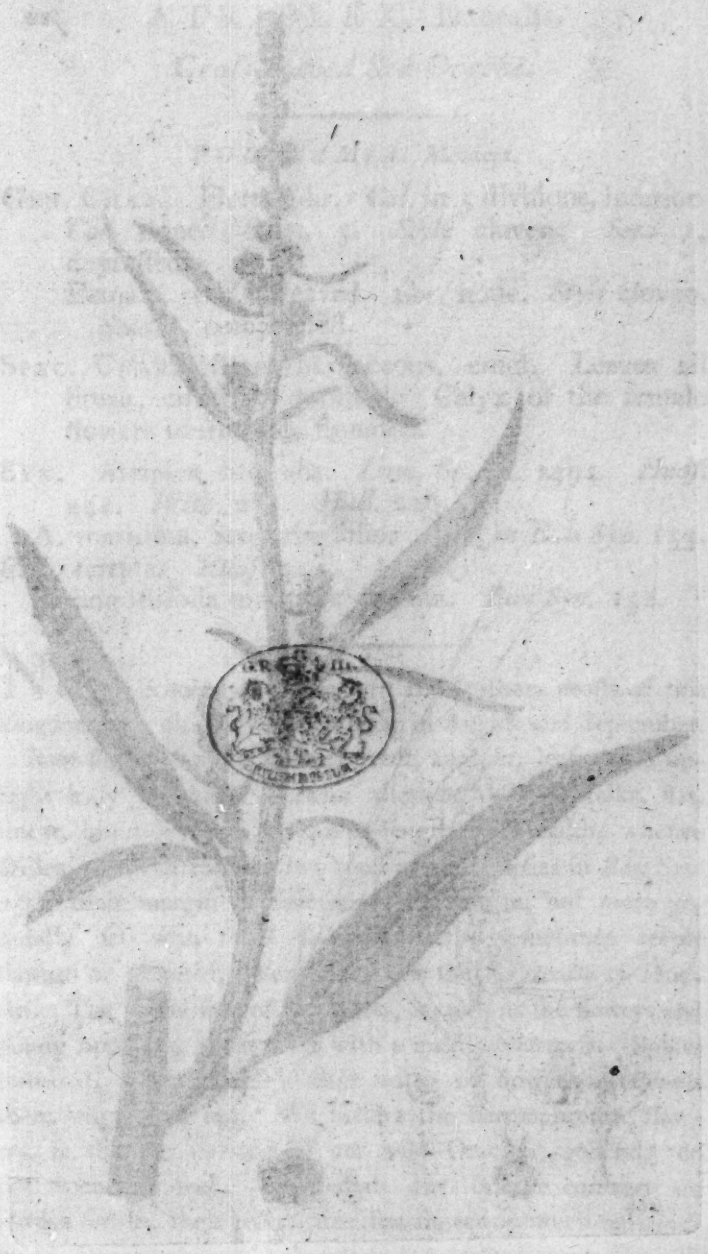
SPEC. CHAR. Leaves linear; haſtate or pinnatifid, ſeſſile, their mid-rib prickly on the back.

SYN. Lactuca ſaligna. *Linn. Sp. Pl.* 1119. *Sm. Fl. Brit.* 820. *Hudſ.* 338. *With.* 678. *Hull.* 175. *Relh.* 293. *Dickſ. H. Sicc. faſc.* 17. 16.

L. ſylveſtris minima. *Raii Syn.* 162.

THE Rev. Mr. Relhan has favoured us with this wild ſpecimen of *Lactuca ſaligna* from the neighbourhood of Cambridge. It loves a calcareous ſoil, but is by no means frequent in any ſituation. The London botaniſts a very few years ſince uſed to find it about Pancras. Dr. Pulteney has remarked it, though rarely, in ſhady lanes in Dorſetſhire. We know of no other places where it has been obſerved.

In habit and ſenſible qualities it agrees with other wild lettuces, but its ſlender oſier-like form, and narrow moſtly entire leaves, which, though haſtate at the baſe, are very ſeldom divided or notched in any other part, readily diſtinguiſh it. The ſtem is brown, a little prickly. Leaves and calyx glaucous. Flowers very ſmall, pale-yellow, opening only in ſunſhine, and ſoon fading. The ſeeds are beautifully furrowed, roughiſh; their down finely jointed. The root is biennial, and the flowers appear in Auguſt. The mid-rib of the leaves, though naturally prickly, is occaſionally ſmooth.





Published by J. Sowerby, London.

# ATRIPLEX littoralis.

## *Graſs-leaved Sea-Orache.*

*POLYGAMIA Monœcia.*

GEN. CHAR. Hermaphr. *Cal.* in 5 diviſions, inferior. *Cor.* none. *Stam.* 5. *Style* cloven. *Seed* 1, depreſſed.

Female. *Cal.* 2 leaved. *Cor.* none. *Style* cloven. *Seed* 1, compreſſed.

SPEC. CHAR. Stem herbaceous, erect. Leaves all linear, entire or toothed. Calyx of the female flowers muricated, ſinuated.

SYN. Atriplex littoralis. *Linn. Sp. Pl.* 1494. *Hudſ.* 444. *With.* 275. *Hull.* 226.

A. maritima, Scopariæ folio. *Dill. in Raii Syn.* 153.

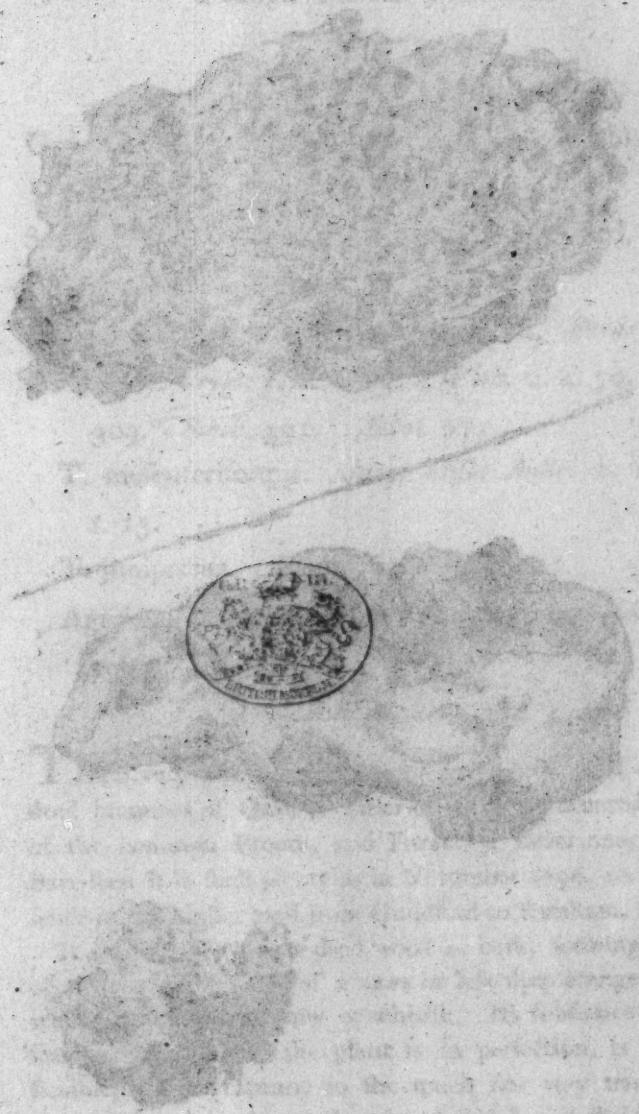
β. A. ſerrata. *Hudſ.* 444.

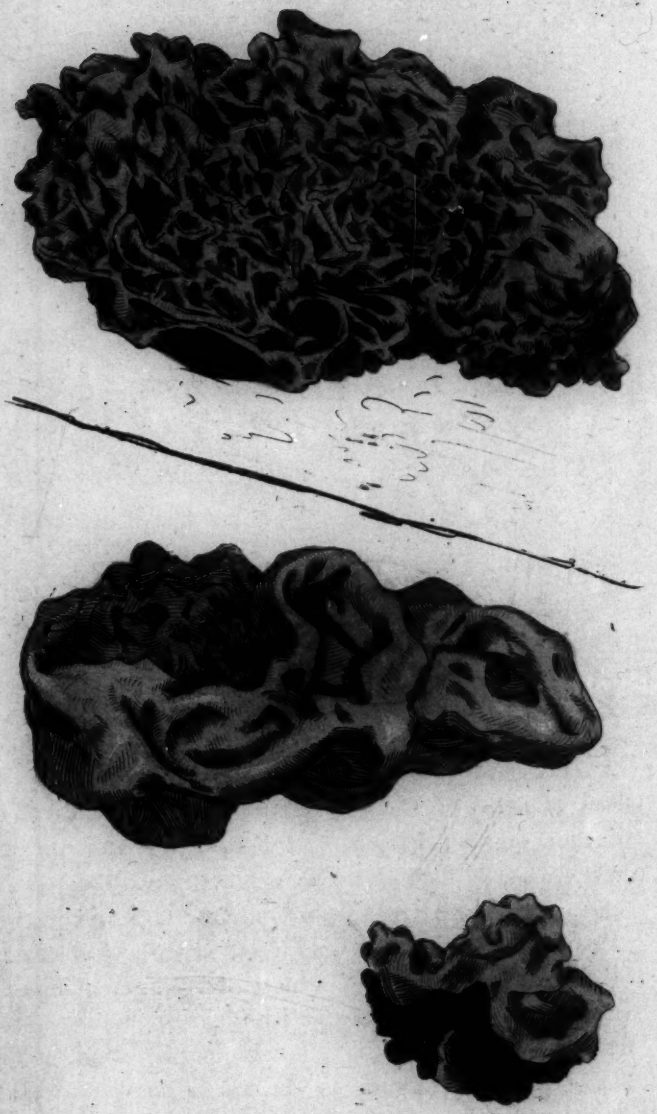
A. anguſtifolia maritima dentata. *Raii Syn.* 152.

NOT unfrequent on the eaſtern and ſouthern coaſts of this kingdom in a muddy ſoil, flowering in Auguſt and September.

Root fibrous, annual. Stem erect, angular, leafy, with upright leafy branches. Leaves alternate, on footſtalks, flat, linear, blunt or ſharp, various in length and breadth, whence Dillenius has introduced two moſt trivial varieties in *Raii Syn.* 153; their margin is ſometimes quite entire, but more generally ſet with ſmall ſcattered teeth, ſometimes deeply toothed or ſinuated, when it becomes the A. *ſerrata* of Hudſon. The under ſide of the leaves, as well as the flowers and young branches, are covered with a mealy hoarineſs. Spikes terminal, denſe, obtuſe; ſhort when in flower, afterwards more lengthened out. We believe the hermaphrodite flowers, in this (as in moſt of our wild Oraches) generally do not ripen any ſeed. The female ones on the contrary are always fertile; their valves are after flowering much enlarged, ovate, deeply and irregularly ſinuated, furniſhed externally with ſeveral large prominent pointed tubercles. The ſeed is flat, its cotyledons ſomewhat ſpiral.

The leaves turn black in drying, like many other ſea plants.





March 1.st 1800 Published by ... Newman ...

# TREMELLA meſenterica.

## *Plaited Yellow Tremella.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. *Fructification* ſcarcely perceptible, in a membranous jelly-like ſubſtance.

SPEC. CHAR. Seſſile, cluſtered, plaited, lobed, waved, orange-coloured.

SYN. Tremella meſenterica. *Retz. Prodr.* 294. *Dickſ. Crypt. faſc.* 1. 14. *With. v.* 4. 79. *Hull.* 309. *Sibth.* 391. *Abbot.* 271.

T. meſenteriformis. *Jacq. Miſc. Auſtr. v.* 1. 142. *t.* 13.

T. juniperina. *Hudſ.* 562. *Relh.* 441.

Agaricus membranaceus ſinuoſus, ſubſtantiâ gelatinæ. *Raii Syn.* 21.

THIS very ſtriking vegetable is found now and then on dead branches of Oaks or other trees, or on decayed ſtumps of the common Broom, and Furze. I never remember to have ſeen it in ſuch plenty as in November 1799, on a hurdle fence in the higher road from Guildford to Farnham, Surrey.

It is always found on dead wood or bark, forming cluſters of various dimenſions, of a more or leſs deep orange-colour; when young, pale yellow or whitiſh. Its ſubſtance in moiſt ſeaſons, when alone the plant is in perfection, is ſoft and flexible, neither clammy to the touch nor very tender. In dry weather, or when gathered and laid by, it ſhrinks conſiderably, grows darker coloured, hard and firm; but revives in moiſture. It has little taſte or ſmell. The fructification is hitherto unknown, yet it appears to be an annual plant, and conſequently propagated by ſeed.


G.R.S. III.



March 1st 1800 Published by J. Sowerby London.

# TREMELLA Sabinæ.

## *Savine Tremella.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. *Fructification* ſcarcely perceptible, in a membranous jelly-like ſubſtance.

SPEC. CHAR. Seſſile, prominent, oblong, tooth-ſhaped, tawny, ſomewhat powdery.

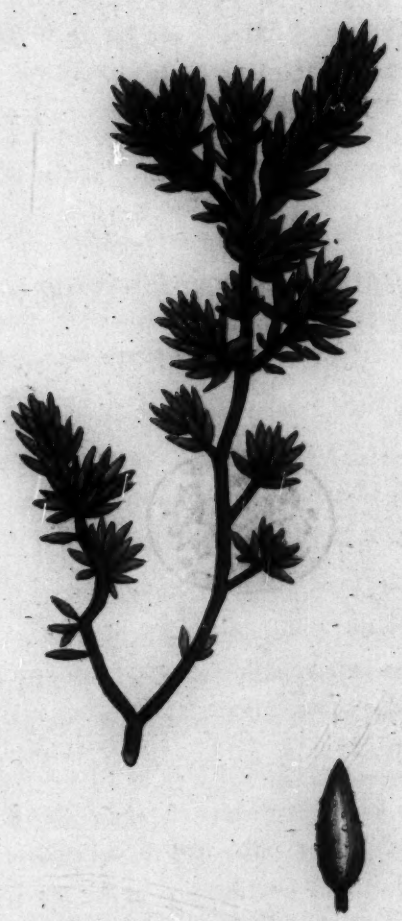
SYN. Tremella Sabinæ. *Dickſ. Crypt. faſc.* 1. 14. *With. v.* 4. 79. *Hull.* 309.

Fungus gelatinus dentatus, Sabinæ adnaſcens, fulvi coloris. *Raii Syn.* 16.

MOST paraſitical plants of the claſs *Cryptogamia* are found either upon totally dead trunks or branches, which is the caſe with *Fungi*, and with *Tremellæ* in general; or they are rooted, like the cruſtaceous Lichens, in decayed external layers of the bark. On the contrary, the production now before us ſprings from the live wood, under the bark, of the moſt vigorous branches of *Juniperus Sabina*. The branch is always ſwelled in that part, but otherwiſe healthy. The excreſcences themſelves are from one line to an inch long, their length and bulk decreaſing exactly in proportion with the thickneſs of the branch from which they originate, ſo that ſome ſituated on the very youngeſt green twigs are extremely ſmall. Theſe never however grow larger. They all come forth together in very wet ſeaſons only, and are oblong, of no very determinate figure, often lobed, of a browniſh orange hue. Their ſubſtance is mucilaginous, their ſurface powdery, but deſtitute of any ſkin. Sometimes they are ſomewhat hollow. In dry weather they ſuddenly collapſe and dry up. —An exactly ſimilar ſubſtance is found on the *Juniperus communis*, and is certainly what Linnæus meant by his *T. juniperina*.

From the above circumſtances I have always thought theſe to be mere gummy exudations, and that the powdery ſurface was owing to reſinous particles, inſoluble in water, accompanying them. No one has hitherto aſſented to this opinion. I propoſe it for the ſake of enquiry only.





Sowerby del. et publish'd by J. Sowerby, London.

# FUCUS ovalis.

## *Oval-leaved Fucus.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. *Seeds* produced in cluſtered tubercles, which burſt at their ſummits.

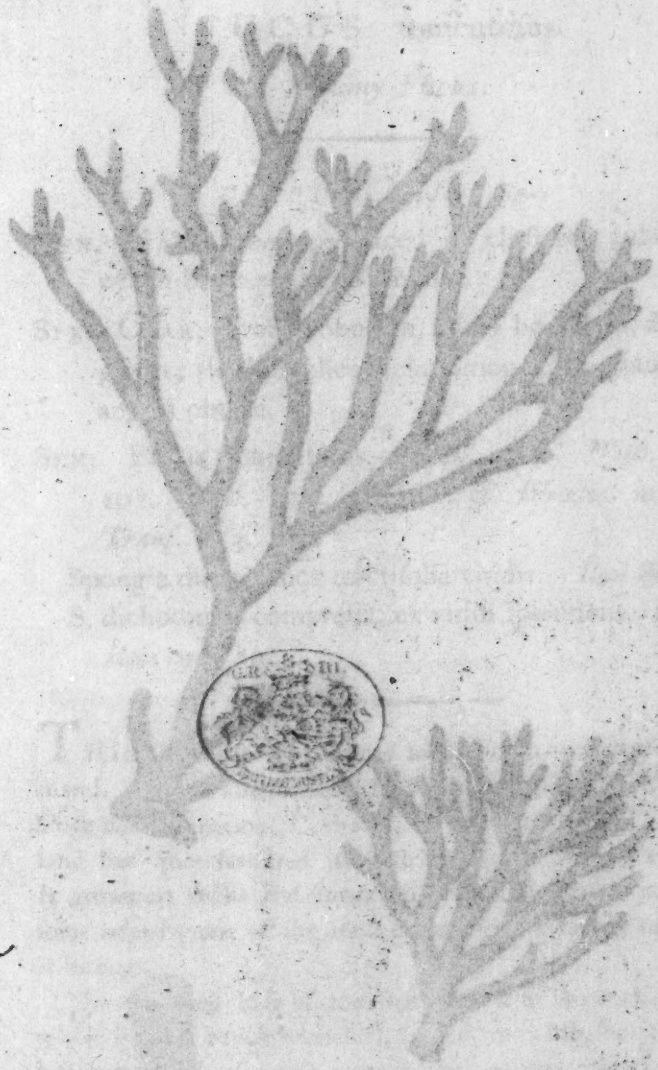
SPEC. CHAR. Stem round, branched, rather rigid. Leaves oval, very fleſhy.

SYN. Fucus ovalis. *Hudſ.* 573. *With. v.* 3. 112. *Hull.* 316. *Gooden. & Woodw. in Linn. Tranſ. v.* 3. 116.

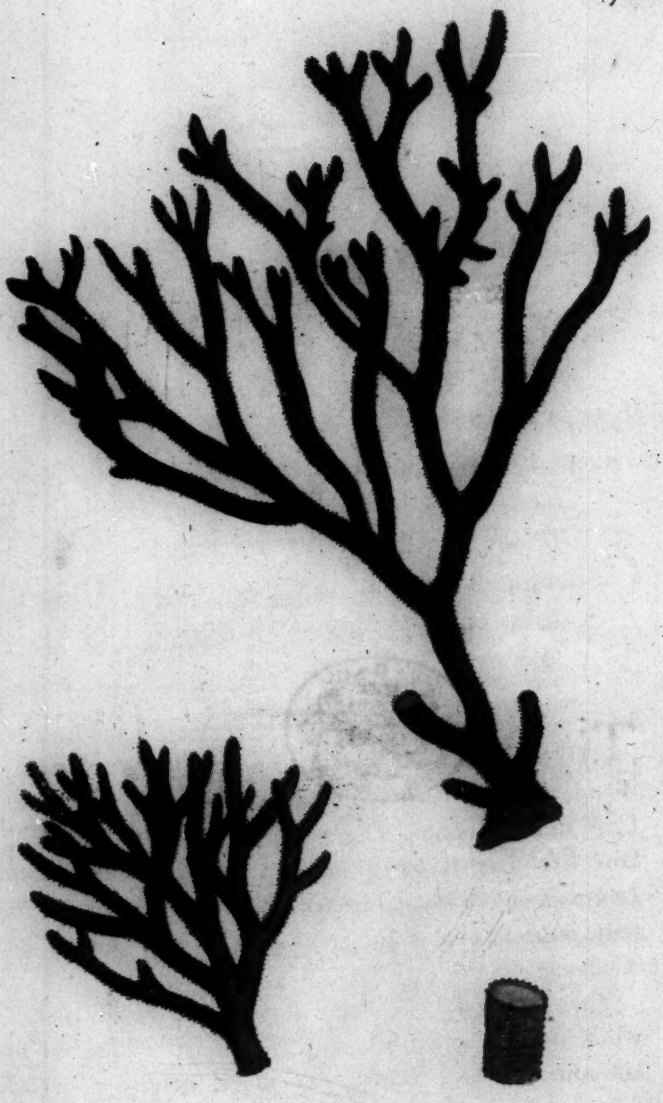
GATHERED laſt ſummer at Weymouth by Mr. D. Turner and Mr. Sowerby. It grows on ſubmarine rocks, and is probably to be found only on the ſouthern coaſt of England, for it is ſuppoſed what Mr. Hudſon had from Scarborough might be the *vermicularis* of Lightfoot.

*Fucus ovalis* grows to the height of 3 or 4 inches, with a variouſly-branched round ſtem. Leaves irregularly ſcattered, moſt cluſtered in the upper part, ſpreading every way, ſeſſile or ſlightly ſtalked; their form cylindrical, but ſwelling into an oval, more or leſs blunt; their ſubſtance very fleſhy and gelatinous; their colour, like that of the whole plant, a reddiſh pale brown. The fructification is ſcattered in tubercles over the ſurface of the leaf, which project, and are of a darker colour; after the diſperſion of the ſeeds they are ſcarcely prominent at all.

*F. botryoides*, deſcribed by Wulfen in *Jacq. Coll. v.* 3, 146. *t.* 13. *f.* 1, comes very near this ſpecies, and perhaps is only a variety of it with ſhorter and blunter leaves.



712.



Hamilton Published by J. Sowerby Londres

# FUCUS tomentoſus.

*Downy Fucus.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. *Seeds* produced in cluſtered tubercles, which burſt at their ſummits.

SPEC. CHAR. Frond roundiſh, much branched, downy, green; the branches dichotomous; the points and angles obtuſe.

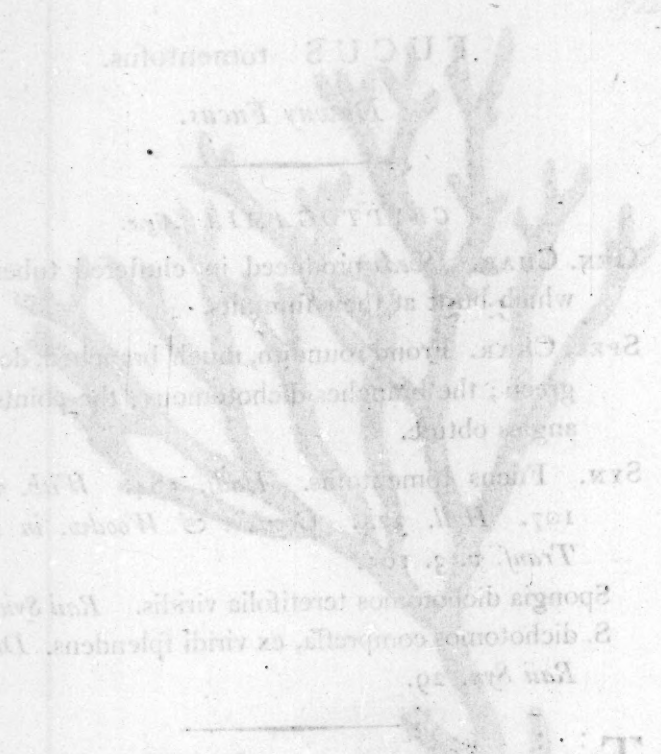
SYN. Fucus tomentoſus. *Hudſ.* 584. *With. v.* 4. 107. *Hull.* 324. *Gooden. & Woodw. in Linn. Tranſ. v.* 3. 195.

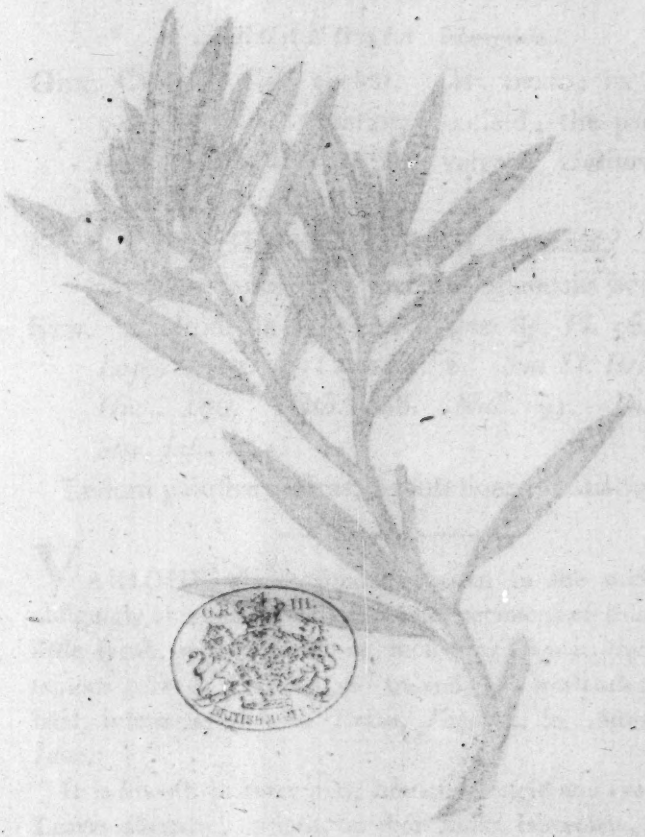
Spongia dichotomos teretifolia viridis. *Raii Syn.* 29.

S. dichotomos compreſſa, ex viridi ſplendens. *Dill. in Raii Syn.* 29.

THIS ſpecies ſeems confined to the ſouth-weſt angle of our iſland. Mr. D. Turner and Mr. Sowerby collected it in King's Cove near Marazion, Cornwall, in June laſt. Sir T. Frankland has ſince favoured us with ſpecimens from Exmouth. It grows on rocks and ſtones under the ſalt water, and is in ſome reſpects one of the moſt curious of the family to which it belongs.

The expanded baſe of the ſtem fixes it to the rocks. The whole frond is much branched, forked, roundiſh, but more or leſs compreſſed, of a full green colour, hollow, remarkable for being all over clothed with ſhort fine velvet-like down, a rare circumſtance in aquatic vegetables. This covering indicates ſome affinity to the *Ulva decorticata* deſcribed by Mr. Woodward in the 3d vol. of the Linnæan Society's Tranſactions, *p.* 55, with which alſo the colour and habit of our *F. tomentoſus* much accord; and as no fructification to prove it a *Fucus* has yet been ſeen, it muſt ſtill remain in doubt between thoſe two genera.







March 1, 1822. Published by J. Sowerby, London.

# ANDROMEDA polifolia.

## *Marſh Andromeda.*

*DECANDRIA Monogynia.*

GEN. CHAR. *Cal.* 5-cleft. *Cor.* ovate; its orifice 5-cleft. *Capſ.* ſuperior, 5-celled; the partitions from the middle of the valves. *Antheræ* with 2 pores.

SPEC. CHAR. Flowers cluſtered, terminal. Leaves alternate, lanceolate, revolute, glaucous beneath.

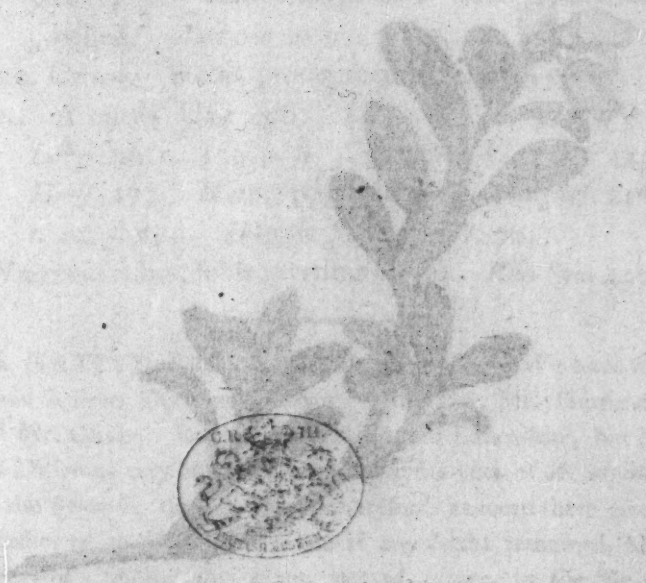
SYN. Andromeda polifolia. *Linn. Sp. Pl.* 564. *Fl. Lapp. ed.* 2. 131. *t.* 1. *f.* 2. *Sm. Fl. Brit.* 441. *Hudſ.* 176. *With.* 398. *Hull.* 91. *Dickſ. H. Sicc. faſc.* 6. 4.

Ledum paluſtre noſtras, Arbuti flore. *Raii Syn.* 472.

VARIOUS of our friends ſituated in the north have obligingly communicated to us wild ſpecimens of this elegant little ſhrub, which grows on moſt peat bogs in the mountainous parts of England and Ireland, and lowlands of Scotland, intermingled with *Ericæ*, *Vaccinia*, &c. flowering in June.

It is ſmooth in every part, branched, rigid and ever-green. Leaves alternate, upright, on ſhort ſtalks, lanceolate, pointed, entire, revolute; of a blueiſh green above; very glaucous beneath. Small ſhort veins are moſt conſpicuous about the mid-rib. The flowers grow on little red cluſtered terminal ſtalks, drooping at firſt, but becoming erect as they fade. Their colour is a delicate roſe-colour, both in the calyx and corolla. Stamina 10. Antheræ brown, each with 2 horns. Capſules brown, erect, with many ſmall ſeeds.

Linnæus in his elegant and inſtructive *Flora Lapponica* has, with his uſual fancy, explained his reaſons for naming this plant *Andromeda*. The paſſage is too long to copy, and it would require his taſte to do juſtice to it in a tranſlation, but nothing can be more poetical than the original.



714.





March 2. 1790. Published by J. Sowerby London.

# ARBUTUS Uva urſi.

## *Red trailing Arbutus.*

*DECANDRIA Monogynia.*

GEN. CHAR. *Cal.* 5-cleft. *Cor.* ovate; its orifice 5-cleft; its baſe tranſparent. *Berry* ſuperior, 5-celled. *Antheræ* with 2 pores.

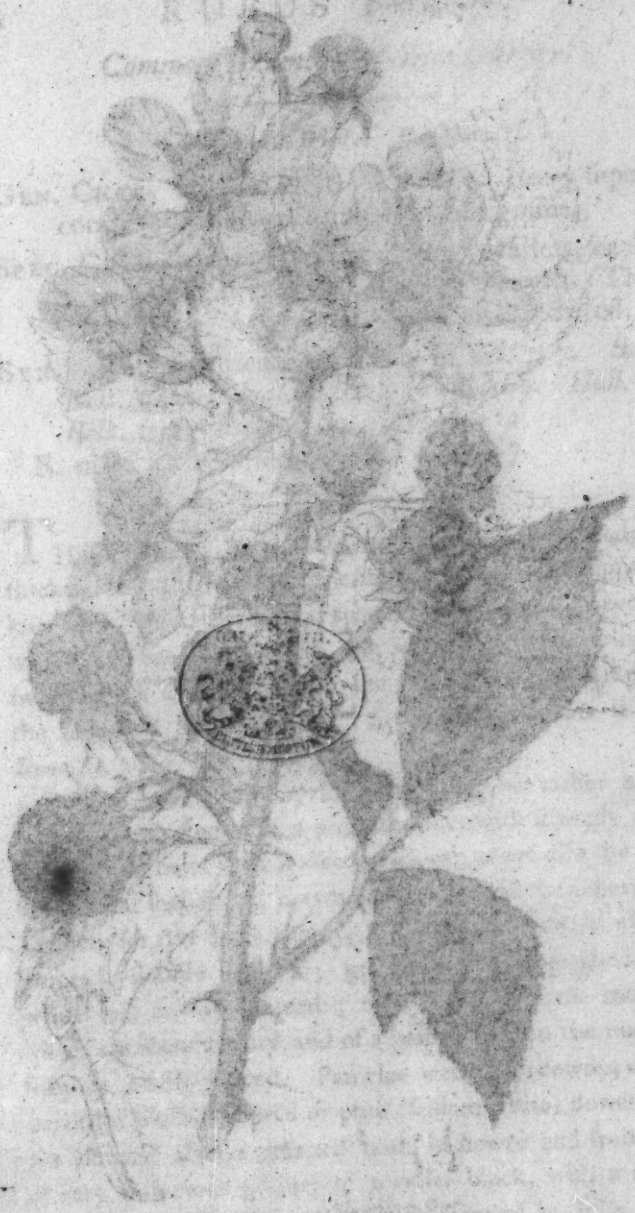
SPEC. CHAR. Stems procumbent. Leaves entire.

SYN. Arbutus Uva urſi. *Linn. Sp. Pl.* 566. *Fl. Lapp. ed.* 2. 129. *t.* 6. *f.* 3. *Sm. Fl. Brit.* 443. *Hudſ.* 177. *With.* 399. *Hull.* 91. *Lightf.* 216. *t.* 11. *f.* c, d. *Woodv. Med. Bot. t.* 70.

Vaccinia rubra, foliis myrtinis criſpis. *Raii Syn.* 457.

A NATIVE of ſtony barren alpine heaths. We have received it from Durham by favour of the Rev. Mr. Harriman and Mr. Oliver. Ray ſaw it growing in Lancaſhire, but he and Dillenius confounded it with the ſynonyms of *A. alpina*, ſee the *Synopſis*, though Dr. Richardſon's account there given is ſufficient to aſcertain it; and if any doubt remained, Mr. Lightfoot's finding this plant, not *A. alpina*, in the iſle of Mull, would remove every uncertainty. It flowers in June. The berries are ſaid to remain all winter, untouched by birds, and the leaves are evergreen. Every part is extremely aſtringent. It has been much recommended as a medicine in calculous and gravelly complaints by the German practitioners, but has not been found ſucceſsful in this country.

The ſtems are long and trailing, branched, woody, clothed with alternate, obovate, obtuſe, entire, wrinkled, dark-green, ſhining leaves. Cluſters terminal, drooping, of a few roſe-coloured handſome flowers. Berries red, depreſſed, auſtere, containing the rudiments of 8 or 10 ſeeds, of which 4 or 5 only in general are perfected. The ſtamina vary from 8 to 10. The antheræ are barbed with 2 briſtles. Many perſons have confounded this plant with *Vaccinium Vitis Idæa*, *t.* 598, which ſomewhat reſembles it, but in that genus the germen is inferior.





April 1. 1808. Published by J. Sowerby, London.

# RUBUS fruticoſus.

## *Common Bramble or Black-berry.*

*ICOSANDRIA Polygynia.*

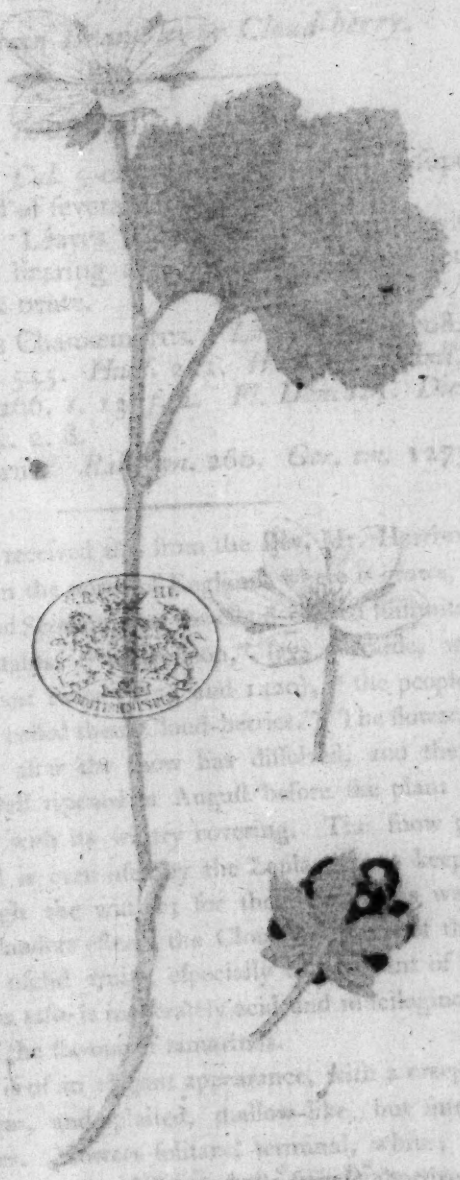
GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Berry* ſuperior, compoſed of ſeveral ſingle-ſeeded grains.

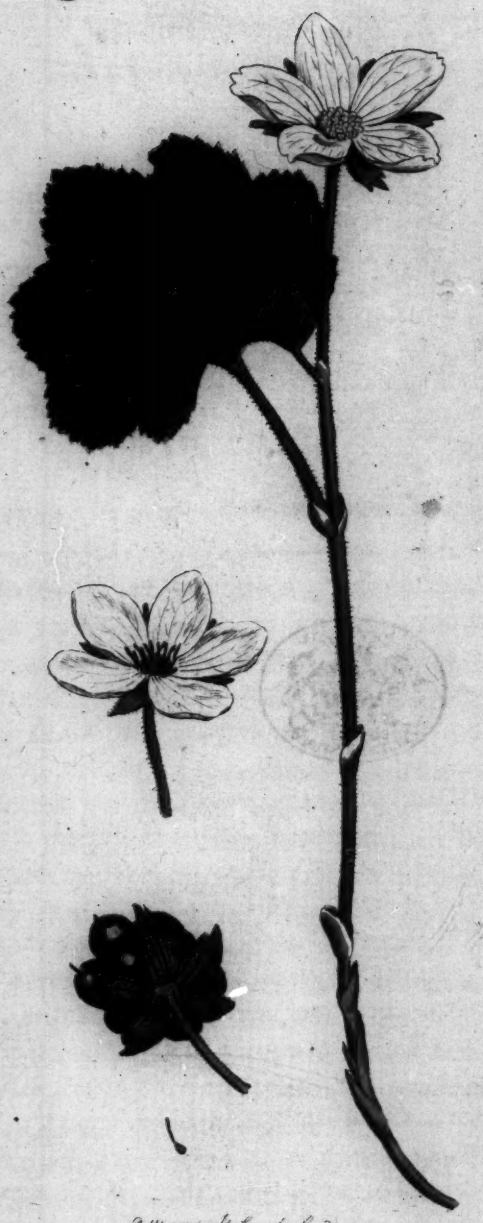
SPEC. CHAR. Leaves generally of 5 leaflets, each on a partial footſtalk, and downy beneath. Thorns all hooked. Stem angular. Calyx reflexed.

SYN. Rubus fruticoſus. *Linn. Sp. Pl.* 707. *Sm. Fl. Brit.* 543. *Hudſ.* 220. *With.* 469. *Hull.* 111. *Relh.* 195. *Sibth.* 160. *Abbot.* 112.
R. major, fructu nigro. *Raii Syn.* 467.

THE Common Bramble grows in almoſt every hedge and thicket, and the moſt inexperienced botaniſt is ſuppoſed to know it. Yet there is a ſpecies almoſt equally common, which has been overlooked, and which Dr. Withering only mentions as a variety. We hope one day to illuſtrate it by the name of *R. corylifolius*. Schmidel repreſents it in his *Icones, t.* 2.

*R. fruticoſus* has very long, trailing, or rather arching, woody, tough ſtems, of a purpliſh hue, with ſtrongly marked angles, and beſet with hooked prickles, as are alſo the general and partial leaf-ſtalks, nerves of the leaf, and the flower-ſtalks. Leaflets for the moſt part 5, all ſtalked, ſomewhat elliptical, pointed, doubly ſerrated; green and ſhining above; very white and downy beneath; rarely, on the ſame root, ſome leaves are merely hairy and of a paler green on the under ſide. Stipulæ briſtle-ſhaped. Panicles terminal, downy, of many beautiful bluſh-coloured or pink (ſeldom white) flowers. Calyx downy, always reflexed both in flower and fruit. Berry of very numerous grains, of a violet black, with a mawkiſh ſweet taſte. The flowers begin to expand in July, and the fruit ripens early in September. The ſeaſon of 1799 indeed was ſo unfavourable, that ſcarcely any Black-berries were to be ſeen ripe in October.





Published by Jas. Sowerby, London.

# RUBUS Chamæmorus.

## *Mountain Bramble, or Cloud-berry.*

*ICOSANDRIA Polygynia.*

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Berry* ſuperior, compoſed of ſeveral ſingle-ſeeded grains.

SPEC. CHAR. Leaves ſimple, lobed. Stem without prickles, bearing a ſingle flower. Segments of the calyx ovate.

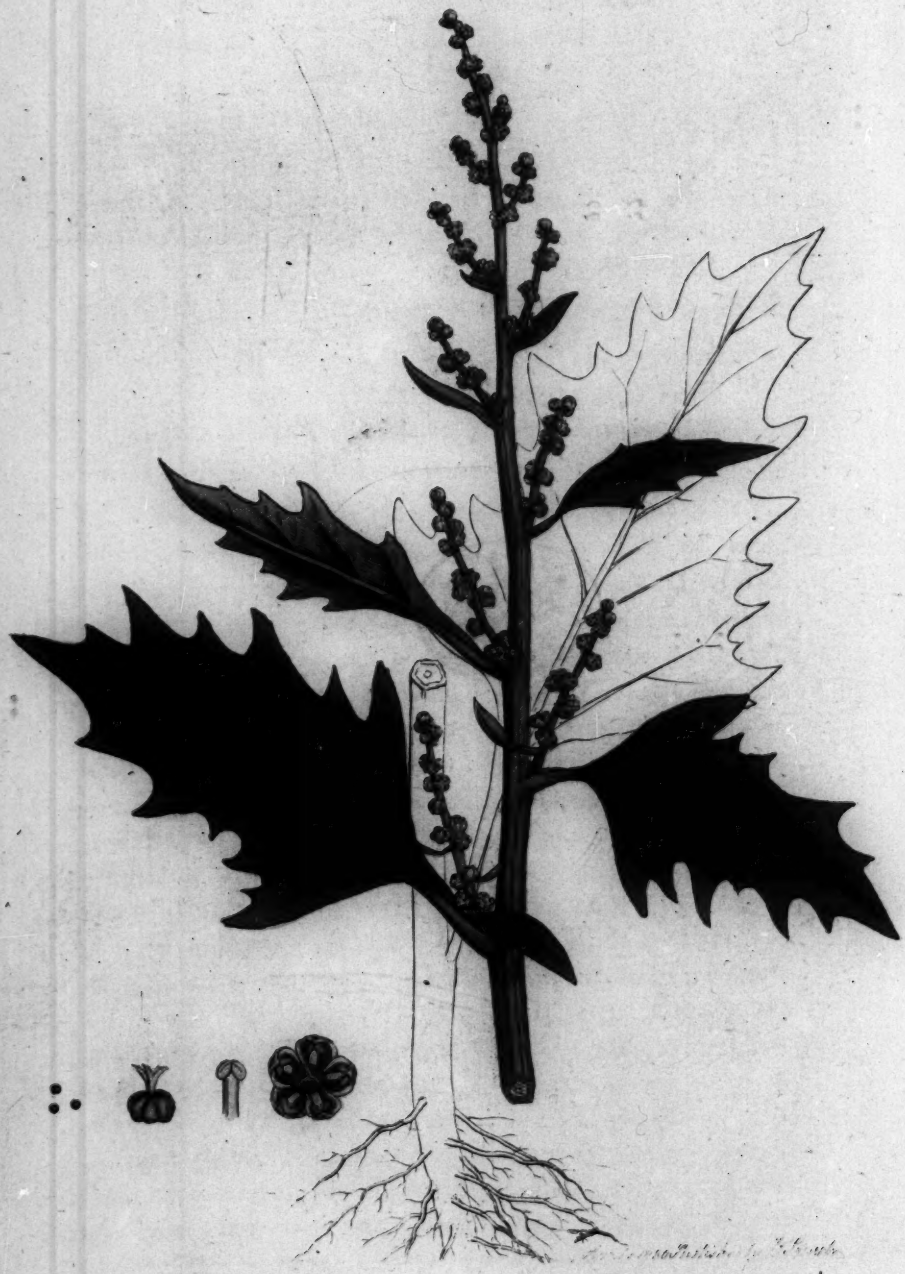
SYN. Rubus Chamæmorus. *Linn. Sp. Pl.* 708. *Sm. Fl. Brit.* 545. *Hudſ.* 221. *With.* 471. *Hull.* 111. *Lightf.* 266. *t.* 13. *f.* 2. *Fl. Dan. t.* 1. *Dickſ. H. Sicc. faſc.* 2. 8.

Chamæmorus. *Raii Syn.* 260. *Ger. em.* 1273.

WE have received this from the Rev. Mr. Harriman and other friends in the north of England, where it grows, as well as in Wales and Scotland, on the cloud-capped ſummits of the higheſt mountains, "whereupon," ſays Gerarde, who has figured the plant twice (1273 and 1420), "the people of the countrey have called them Cloud-berries." The flowers appear in June ſoon after the ſnow has diſſolved, and the berries are ſcarcely well ripened in Auguſt before the plant is again overwhelmed with its wintry covering. The ſnow preſerves the fruit, and is even uſed by the Laplanders to keep it artificially through the winter; for thoſe people as well as the Scottiſh highlanders eſteem the Cloud-berry one of their moſt grateful and uſeful fruits, eſpecially on account of its long duration. Its taſte is moderately acid and mucilaginous, with ſomething of the flavour of tamarinds.

The plant is of an elegant appearance, with a creeping root, a ſimple ſtem, and plaited, mallow-like, but ſmooth and hardiſh leaves. Flowers ſolitary, terminal, white; the male having ſhort abortive piſtilla, and the female abortive ſtamina. We have not had an opportunity of verifying Dr. Solander's remark, ſo often copied, that the two ſexes ſpring from one common root. The berries are of a tawny or dull orange-colour. Calyx inflexed; its ſegments oval or elliptical.





# CHENOPODIUM urbicum.

## *Upright Gooſefoot.*

*PENTANDRIA Digynia.*

GEN. CHAR. *Cal.* 5-cleft, inferior. *Cor.* none. *Seed* 1, lenticular, inveſted with the cloſed five-ſided calyx.

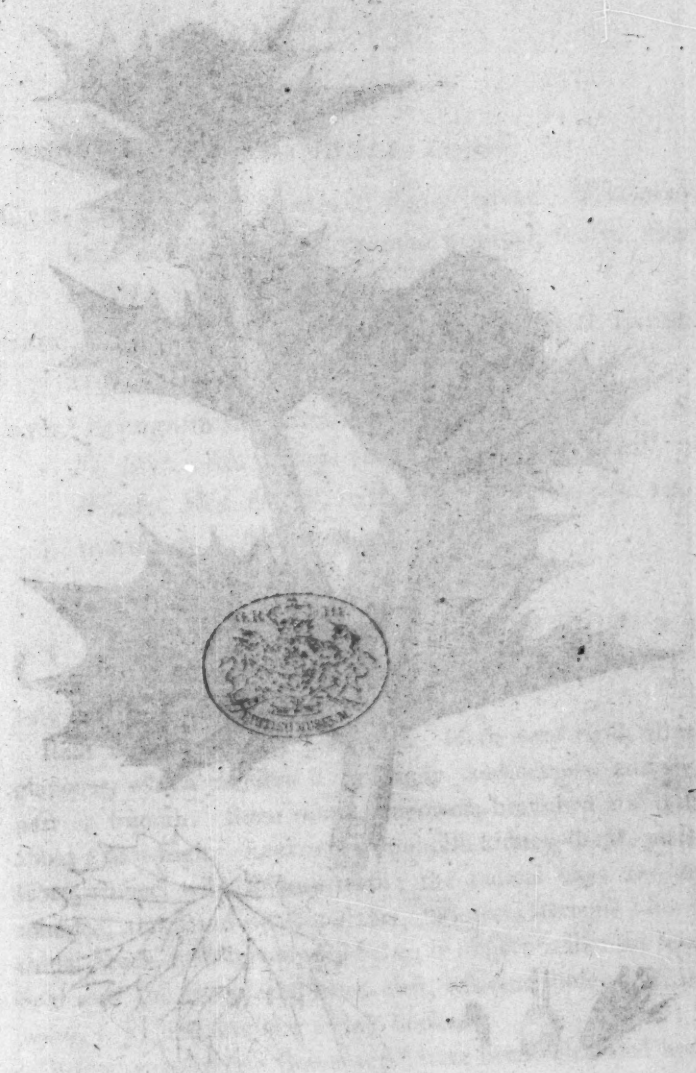
SPEC. CHAR. Leaves triangular, toothed. Cluſters denſe, very ſtraight, long, approaching the ſtem, and almoſt leafleſs.

SYN. Chenopodium urbicum. *Linn. Sp. Pl.* 318. *Sm. Fl. Brit.* 273. *Hudſ.* 104. *With.* 270. *Hull.* 56. *Sibth.* 87. *Abbot.* 54.

C. erectum, foliis triangularibus dentatis, ſpicis e foliorum alis plurimis longis erectis tenuibus. *Dill. in Raii Syn.* 155.

THIS is one of the moſt difficult to aſcertain of all our Britiſh ſpecies of *Chenopodium*, and I confeſs myſelf entirely obliged to Mr. Curtis in his *Fl. Lond. faſc.* 6. *t.* 21, for a deciſive mark to diſtinguiſh it from the *rubrum*, which conſiſts in the ripe ſeeds of the latter being no larger than grains of writing ſand, whereas thoſe of the plant now before us are at leaſt five times that ſize, or about as big as Rape ſeed. In the red or green colour of the ſtem and flowers both plants vary. C. *urbicum* however has the leaves in general more truly triangular, leſs lengthened out at the baſe, and not ſo deeply ſinuated as the other; cluſters more ſtraight and erect, at length cloſe-preſſed to the ſtem, and almoſt deſtitute of the little leaves ſo copiouſly interſperſed among the flowers of C. *rubrum*. The flowers in both are occaſionally polygamous; but the calyx being univerſally regular, five-cleft, and not much enlarged after flowering, clearly ſeparates *Chenopodium* from *Atriplex*.

C. *urbicum* is common in St. George's fields, flowering in Auguſt and September. It is annual, and thrives on dunghills and waſte places about towns or villages. We have ſpecimens from Norfolk, Oxfordſhire, and Bedfordſhire.





# ERYNGIUM maritimum.

## *Sea Eryngo.*

*PENTANDRIA Digynia.*

GEN. CHAR. *Involucrum* of many leaves. *Flowers* in little denſe heads. *Receptacle* conical, ſcaly. *Seeds* briſtly.

SPEC. CHAR. Radical leaves roundiſh, plaited, ſpinous. Heads of flowers on ſtalks. Scales three-cleft.

SYN. Eryngium maritimum. *Linn. Sp. Pl.* 337. *Sm. Fl. Brit.* 288. *Hudſ.* 109. *With.* 283. *Hull.* 58. *Woodv. Med. Bot. t.* 102. *Dickſ. H. Sicc. faſc.* 10. 3.
E. marinum. *Raii Syn.* 222.

COMMON in the looſe ſand of the ſea ſhore, flowering in July and Auguſt.

Root long, creeping, perennial. Herb very rigid, all-over glaucous, which renders it ſtrikingly conſpicuous, and every part is ſmooth. Stem round, furrowed, branched and buſhy, about a foot high. Leaves of a roundiſh kidney-ſhape, plaited, lobed, ribbed, with ſpinous teeth; the radical ones are more rounded, and ſtand on foot-ſtalks. Flowers in denſe blue terminal heads, each ſurrounded by an involucrum like the leaves. Scales of the receptacle three-cleft, whereas thoſe of E. *campeſtre*, *t.* 57, are ſimple. Petals hooked.

"Eryngo roots and Bohea tea" have been celebrated by our moſt witty poet Prior for their reſtorative or ſtimulating qualities. Under this idea, perhaps not ill-founded with reſpect to the Eryngo, theſe roots have been much uſed in domeſtic medicine, and are ſometimes ſold candied; a very elegant mode of preparing them. A ſhop at Colcheſter, Mr. Great's, has been famous for them for ſeveral generations.

# JUNGERMANNIA [illegible]

*Spreading-leaved Jungermannia.*

---

CRYPTOGAMIA [illegible]

GEN. CHAR. Male flowers [illegible].
Female on a [illegible] rising from a sheath. Caps. with a [illegible] elastic filaments.

SPEC. CHAR. Fronds [illegible], simply pinnate, filiform, flowering at the end. Leaves alternate, deeply cloven; lobes divaricated, pointed. Sheath toothed.

---

FOR this [illegible] Jungermannia we are indebted to the Rev. Mr. [illegible] found it on Holt and Edgefield heaths, Norfolk, [illegible] flowering from October [illegible] in the [illegible] collection of the late Rev. [illegible] N. Hudson [illegible] determine [illegible] Francis [illegible] and remarks [illegible] the following particulars.

The fronds [illegible] a quarter of an inch long, when [illegible] branches [illegible] the leaves [illegible] selves. The leaves [illegible] alternate, [illegible] pointed [illegible] in the [illegible] Male flowers [illegible]

G. R. III.



April 1.1802. Published by J. Sowerby, London.

# JUNGERMANNIA divaricata.

*Spreading-leaved Jungermannia.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. Male flowers ſeſſile.

Female on a foot-ſtalk riſing from a ſheath. *Capſ.* with 4 valves. *Seeds* attached to elaſtic filaments.

SPEC. CHAR. Fronds unbranched, ſimply pinnate, filiform, flowering at the end. Leaves alternate, deeply cloven; their lobes divaricated, pointed. Sheath toothed.

FOR this minute nondeſcript Jungermannia we are indebted to the Rev. Mr. Francis, who found it on Holt and Edgefield heaths, Norfolk, intermixed with J. *exciſa*, flowering from October to March. Specimens of the ſame are in the rich collection of the late Rev. H. Bryant, now in the poſſeſſion of Miſs Hancock of Norwich; but their name and characters were never determined, the fructification having been unknown till Mr. Francis detected it in October 1798. From his accurate figure and remarks we have aſcertained the following particulars.

The ſhoots are ſimple, ſlender, about a quarter of an inch long, when unſupported trailing and intricate, protruding roots here and there, which ſometimes ſpring from the leaves themſelves. The leaves are alternate, of 2 pointed entire lobes, which in the older ones are remarkably divaricated. Male flowers in ſolitary terminal round heads. Sheath on a ſeparate ſhoot, terminal, ſolitary, ovate, minutely toothed. Stalk ſlender, bearing a minute oval capſule, burſting as uſual into four parts. The colour of the plant in ſhady ſituations is deep green; in expoſed, duſky purple. Sometimes its denſe tufts reſemble ſmall ſpecimens of *Bryum argenteum*.

# LICHEN tribus.

*Dark radiated Lichen.*

CRYPTOGAMIA *Alga.*

Gen. Char. Male [illegible]

Fructus [illegible] in which the seeds [illegible]

Spec. Char. [illegible] Shield [illegible]

Syn. [illegible]

*With.* 4[illegible]

L. radiatus. *Huds.* *Dicks. H. Sicc. fasc.* 9. n. 5.

L. cornuculatus. *Lightf.* 825.

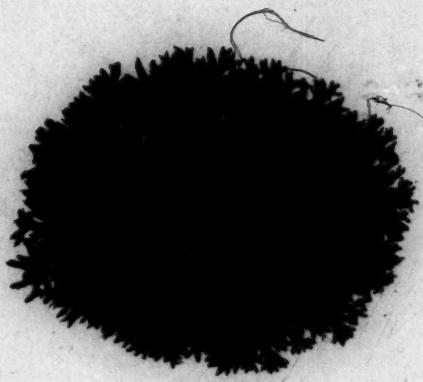
Corniculatis trifidis. *Hoffm. Pl. Lich.* I. 34. f. 1.

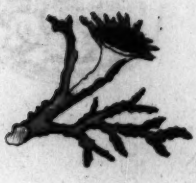
Coralloides, corniculatum, Foeti ramentis facie. *Dill.*

*Musc.* 118. t. 17. f. 2.



A NATIVE [illegible]





Lyon. del. 1800. Published by J.T. Sowerby London.

# LICHEN triſtis.

## *Dark radiated Lichen.*

*CRYPTOGAMIA Algæ.*

GEN. CHAR. Male, ſcattered warts.

Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Shrubby, branched, ſomewhat compreſſed, ſolid, blackiſh; the branches acute. Shields of the ſame colour, flattiſh, radiated.

SYN. Lichen triſtis. *Weber. Gotting.* 209. *t.* 5. *With.* 43. *Hull.* 305.

L. radiatus. *Hudſ.* 559. *Dickſ. H. Sicc. faſc.* 9. 25.

L. corniculatus. *Lightf.* 885.

Cornicularia triſtis. *Hoffm. Pl. Lich. t.* 34. *f.* 1.

Coralloides corniculatum, Fuci tenuioris facie. *Dill. Muſc.* 118. *t.* 17. *f.* 37.

A NATIVE of alpine micaceous rocks in Scotland, Wales, Weſtmoreland, and Devonſhire. It grows in denſe tufts, conſiſting of numerous, upright, branched or forked ſtems, of a blackiſh brown, inclining to olive when wet, paler in the lower part or where ſheltered from light. All the branches are ſolid, a little compreſſed, pointed, ſometimes warty. The ſhields terminate the original ſtem, and are not only ſurmounted by numerous branches, but their margin itſelf is alſo radiated with ſharp irregular points. Their diſk is flattiſh, ſmooth, of the ſame colour as the reſt of the plant, or if any thing rather blacker and more poliſhed.

Profeſſor Hoffman's figure is taken from a ſmaller and younger ſpecimen than ours, and does not ſo well expreſs the uſual colour and habit as moſt of his admirable plates. We follow him in retaining the original ſpecific name *triſtis*, firſt given by Weber.

G.R. III.
BRITISH MUSEUM

# SYSTEMATICAL INDEX

TO

VOL. X.


*Diandria.*

Tab.

VERONICA hybrida — 673
——— Beccabunga — 655

*Triandria.*

Valeriana officinalis — — 698
Scirpus lacuſtris — — 666

*Tetrandria.*

Scabioſa arvenſis — — 659
Galium verum — — — 660

*Pentandria.*

Anchuſa officinalis — — 662
Aſperugo procumbens — — 661
Samolus Valerandi — — 703
Ribes alpinum — — 704
—— petræum — — — 705
Chenopodium urbicum — — 717
Eryngium maritimum — — 718
Ligusticum cornubienſe — — 683
Phellandrium aquaticum — 684
Scandix odorata — — 697
Corrigiola littoralis — — 668

*Hexandria.*

Juncus glaucus — — — 665
——-- campeſtris — — 672

*Octandria.*

Epilobium roſeum — — 693
Polygonum viviparum — — 669

*Enneandria.*

Butomus umbellatus — — 651

*Decandria.*

Andromeda polifolia — — 713
Arbutus Uva urſi — — 714
Saxifraga umbroſa — — 663
——— cernua — — — 664
Sedum daſyphyllum — — 656
——- reflexum — — 695
Spergula nodoſa — — 694

*Icoſandria.*

Prunus Ceraſus — — 706
Rubus fruticoſus — — 715
——- Chamæmorus — — 716

*Polyandria.*

Ranunculus ſceleratus — — 681
——— acris — — 652

*Didynamia.*

Tab.

Teucrium Chamædrys — — 680
Mentha ſylveſtris — — 686
——— piperita — — 687
Galeopſis verſicolor — — 667
Rhinanthus Criſta galli — — 657
Antirrhinum ſpurium — — 691
——— Elatine — — 692
——— Linaria — — 658
Sibthorpia europæa — — 649

*Tetradynamia.*

Cochlearia danica — — 696

*Monadelphia.*

Malva ſylveſtris — — 671

*Diadelphia.*

Ononis arvenſis — — 682
Lathyrus pratenſis — — 670

*Syngeneſia.*

Sonchus arvenſis — — 674
Lactuca ſaligna — — 707
Carduus heterophyllus — — 675
Senecio paludoſus — — 650
Pyrethrum inodorum — — 676

*Monœcia.*

Carex hirta — — 685
Ceratophyllum ſubmerſum — 679

*Polygamia.*

Atriplex littoralis — — 708

*Cryptogamia.*

Jungermannia divaricata — 719
Lichen pertuſus — — 677
——-- incluſus — — 678
——-- gelidus — — 699
——-- fahlunenſis — — 653
——-- tiliaceus — — 700
——-- caperatus — — 654
——-- ſcopulorum — — 688
——-- triſtis — — 720
Tremella meſenterica — — 709
——— Sabinæ — — 710
Fucus ovalis — — 711
—— tomentoſus — — 712
Conferva gelatinoſa — — 689
——— atra — — 690
Byſſus barbata — — 701
——- nigra — — 702

# ALPHABETICAL INDEX

TO

VOL. X.


| | Tab. |
|---|---|
| ANCHUSA officinalis | 662 |
| Andromeda polifolia | 713 |
| Antirrhinum Elatine | 692 |
| ———, Linaria | 658 |
| ———, Spurium | 691 |
| Arbutus Uva urſi | 714 |
| Aſperugo procumbens | 661 |
| Atriplex littoralis | 708 |
| Butomus umbellatus | 651 |
| Byſſus barbata | 701 |
| —— nigra | 702 |
| Carduus heterophyllus | 675 |
| Carex hirta | 685 |
| Ceratophyllum ſubmerſum | 679 |
| Chenopodium urbicum | 717 |
| Cochlearia danica | 696 |
| Conferva atra | 690 |
| ——— gelatinoſa | 689 |
| Corrigiola littoralis | 668 |
| Epilobium roſeum | 693 |
| Eryngium maritimum | 718 |
| Fucus ovalis | 711 |
| ——— tomentoſus | 712 |
| Galeopſis verſicolor | 667 |
| Galium verum | 660 |
| Juncus campeſtris | 672 |
| —— glaucus | 665 |
| Jungermannia divaricata | 719 |
| Lactuca ſaligna | 707 |
| Lathyrus pratenſis | 670 |
| Lichen caperatus | 654 |
| ——— fahlunenſis | 653 |
| ——— gelidus | 699 |
| ——— incluſus | 678 |
| ——— pertuſus | 677 |
| ——— ſcopulorum | 688 |
| Lichen tiliaceus | 700 |
| ——— triſtis | 720 |
| Liguſticum cornubienſe | 683 |
| Malva ſylveſtris | 671 |
| Mentha piperita | 687 |
| ——— ſylveſtris | 686 |
| Ononis arvenſis | 682 |
| Phellandrium aquaticum | 684 |
| Polygonum viviparum | 669 |
| Prunus Ceraſus | 706 |
| Pyrethrum inodorum | 676 |
| Ranunculus acris | 652 |
| ——— ſceleratus | 681 |
| Rhinanthus Criſta galli | 657 |
| Ribes alpinum | 704 |
| —— petræum | 705 |
| Rubus Chamæmorus | 716 |
| —— fruticoſus | 715 |
| Samolus Valerandi | 703 |
| Saxifraga cernua | 664 |
| ——— umbroſa | 663 |
| Scabioſa arvenſis | 659 |
| Scandix odorata | 697 |
| Scirpus lacuſtris | 666 |
| Sedum daſyphyllum | 656 |
| —— reflexum | 695 |
| Senecio paludoſus | 650 |
| Sibthorpia europæa | 649 |
| Sonchus arvenſis | 674 |
| Spergula nodoſa | 694 |
| Teucrium Chamædrys | 680 |
| Tremella meſenterica | 709 |
| ——— Sabinæ | 710 |
| Valeriana officinalis | 698 |
| Veronica Beccabunga | 655 |
| ——— hybrida | 673 |



# INDEX

## OF THE ENGLISH NAMES

IN VOL. X.


| | Tab. |
|---|---|
| ALKANET, common | 662 |
| Andromeda, marſh | 713 |
| Arbutus, red trailing | 714 |
| Bedſtraw, yellow | 660 |
| Bird's-tongue | 650 |
| Biſtort, alpine | 669 |
| Black-berry | 715 |
| Bramble, common | 715 |
| ———, mountain | 716 |
| Brooklime | 655 |
| Brook-weed | 703 |
| Bull-ruſh | 666 |
| Byſſus, bearded yellow | 701 |
| ———, black rock | 702 |
| Carex, hairy | 684 |
| Cherry-tree, wild | 706 |
| Chervil, great | 697 |
| Cicely, ſweet | 697 |
| Cloud-berry | 716 |
| Conferva, black, beaded | 690 |
| ———, frog-ſpawn | 689 |
| Crowfoot, celery-leaved | 681 |
| ———, upright, meadow | 652 |
| Currants, rock | 705 |
| ———, taſteleſs, mountain | 704 |
| Eryngo, ſea | 718 |
| Feverfew, corn | 676 |
| Fluellin, round-leaved | 691 |
| ———, ſharp-pointed | 692 |
| Fucus, downy | 712 |
| ———, oval-leaved | 711 |
| Germander, wall | 680 |
| Gooſefoot, upright | 717 |
| Groundſel, marſh | 650 |
| Hemlock, water | 684 |
| Hemp-nettle, large-flowered | 667 |
| Hornwort, unarmed | 679 |
| Jungermannia, ſpreading-leaved | 719 |
| Lettuce, leaſt | 707 |
| Lichen, covered | 678 |
| Lichen, dark radiated | 720 |
| ———, flat black rock | 653 |
| ———, fleſh-coloured alpine | 699 |
| ———, ivory rock | 688 |
| ———, pierced | 677 |
| ———, ſmooth grey | 700 |
| ———, wrinkled ſulphur | 654 |
| London pride | 663 |
| Lovage, Corniſh | 683 |
| Madwort, German | 661 |
| Mallow, common | 671 |
| Mayweed, ſcentleſs | 676 |
| Mint, horſe | 686 |
| ——, pepper | 687 |
| Moneywort, Corniſh | 649 |
| None-ſo-pretty | 663 |
| Orache, graſs-leaved ſea | 708 |
| Pimpernel, water | 703 |
| Rattle, yellow | 657 |
| Reſt-harrow | 682 |
| Ruſh, bull | 666 |
| ——, flowering | 651 |
| ——, hairy field | 672 |
| ——, hard | 665 |
| Saxifrage, drooping bulbous | 664 |
| Scabious, field | 659 |
| Scurvy-graſs, Daniſh | 696 |
| Sow-thiſtle, corn | 674 |
| Speedwell, Welch | 673 |
| Spurrey, knotted | 694 |
| Stone-crop, thick-leaved | 656 |
| ———, yellow | 695 |
| Strap-wort, ſand | 668 |
| Thiſtle, melancholy | 675 |
| Toadflax, yellow | 658 |
| Tremella, plaited, yellow | 709 |
| ———, Savine | 710 |
| Valerian, great wild | 698 |
| Vetchling, meadow | 670 |
| Willow-herb, pale ſmooth | 693 |

# INDEX

## OF THE ENGLISH NAMES